### 10/591.174

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FILE 'HOME' ENTERED AT 09:07:43 ON 14 DEC 2009
=> file req
=> Uploading C:\Program Files\Stnexp\Queries\Oueries\10591174.str
chain nodes :
20 22 24 29 30
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
chain bonds :
2-24 3-22 9-20 10-14 12-30 16-29
ring bonds :
1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14
14-15 15-16
exact/norm bonds :
2-24 3-22 4-5 4-7 5-6 5-10 7-8 8-9 9-10 9-20 10-14 11-12 11-16 12-13
12-30 13-14 14-15 15-16 16-29
normalized bonds :
1-2 1-6 2-3 3-4
isolated ring systems :
containing 11 :
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G1:C,H

G2:C,H,O,S,X

G3:C,O,S

G4:C,N

G5:C,O,X

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 20:CLASS 22:CLASS 24:CLASS 29:CLASS 30:CLASS

=> s 11 sam

L2 3 SEA SSS SAM L1

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=> s 11 full
            574 SEA SSS FUL L1
=> file caplus
=> s 13
T. 4
            75 L3
=> s 14 and pd< march 2004
      24855791 PD< MARCH 2004
                 (PD<20040300)
1.5
            61 L4 AND PD< MARCH 2004
=> dis 15 1-61 bib abs hitstr
     ANSWER 1 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
AN
     2004:1079594 CAPLUS Full-text
DN
     143:70979
ΤТ
     The chromatographic data in OSAR assay of TIOs derivatives with
     β2-adrenergic activity
ΑU
     Brzezinska, Elzbieta; Stolarska, Justyna
     Department of Analytical Chemistry, Medical University of Lodz, Lodz,
     90-151, Pol.
     Acta Poloniae Pharmaceutica (2004), 61(4), 249-254
SO
     CODEN: APPHAX: ISSN: 0001-6837
PR
     Polish Pharmaceutical Society
DT
    Journal
    English
LA
AB
    We performed QSAR anal. of \beta2-adrenergic activity and chromatog. data of
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AB We performed QSAR anal. of  $\beta 2$ -adrenergic activity and chromatog, data of 4,6,8-trihydroxyy-, 6,7-dhydroxyy- and 6,7-dhentoxyy-1,2,3,4-tetrahydroisoquinoline derivs. TLC plates (silica gel NP 60 F254 and silica gel RP2 60F254 silanised precoated), impregnated with solns. of analogs of the selected amino acids were used as  $\beta 2$ -agonistic and antagonistic interaction models. QSAR anal. of the  $\beta 2$ -adrenergic activity and the chromatog, data of the solutes were made. A correlation between biol. data and behavior of the examined compds. in a chromatog, modifiable environment (S1-S3) was investigated by the linear regression anal. method.

33033-84-0 188553-85-7

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chromatod. data in QSAR assay of

6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivs. with

β2-adrenergic activity)

RN 33033-84-0 CAPLUS

- RN 188553-85-7 CAPLUS
- CN 6,7-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 2 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:571544 CAPLUS Full-text
- DN 141:296185
- TI Asymmetric Pictet-Spengler reactions. Synthesis of tetrahydroisoquinoline derivatives from L-DOPA
- AU Wang, Ye; Liu, Zhan Zhu; Chen, Shi Zhi; Liang, Xiao Tian

RL: SPN (Synthetic preparation); PREP (Preparation)

- CS Institute of Materia Medica, Peking Union Medical College and Chinese Academy of Medical Sciences, Beijing, 100050, Peop. Rep. China
- SO Chinese Chemical Letters (2004), 15(5), 505-507
- CODEN: CCLEE7; ISSN: 1001-8417
- PB Chinese Chemical Society
- DT Journal
- LA English
- OS CASREACT 141:296185
- AB The cis-1-substituted-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline-3carboxylic acid esters can be obtained in a highly diastereoselective fashion through 1,3-induction Pictet-Spengler cyclization of the L-DOPA (3,4dihydroxyphenylalanine) Me ester with aromatic or alighatic aldehydes under acidic conditions. Their epimers are also obtained as minor products.
- IT 764660-42-6P 764660-55-1P
  - (asym. Pictet-Spengler reactions for preparation of tetrahydroisoquinoline derivs. from 3,4-Dihydroxyphenylalanine Me ester and aldehydes)
- RN 764660-42-6 CAPLUS
- CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, methyl ester, (1R,3R)-rel- (CA INDEX NAME)

Relative stereochemistry.

- 764660-55-1 CAPLUS
- CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5trimethoxyphenyl)-, methyl ester, (1R,3S)-rel- (CA INDEX NAME)

Relative stereochemistry.

OSC.G THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS) RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 3 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- 2004:362287 CAPLUS Full-text AN
- DN 141:360522
- ΤI Cardiopulmonary effects of the novel neuromuscular blocking drug GW280430A
- (AV430A) in dogs AU Heerdt, Paul M.; Kang, Richard; The', Andrew; Hashim, Mir; Mook, Robert
- J.; Savarese, John J. CS Departments of Anesthesiology and Pharmacology, Weill Medical College of Cornell University, New York, NY, 10021, USA
- SO Anesthesiology (2004), 100(4), 846-851
- CODEN: ANESAV: ISSN: 0003-3022
- PB Lippincott Williams & Wilkins
- DT Journal English
- T.A
- AB Background: This investigation determined the cardiopulmonary side effects of a novel nondepolarizing neuromuscular blocking drug with an ultrashort duration of action in anesthetized male beagles. Methods: The ED95 for GW280430A was first determined in four animals. These data were then used to quide bolus dosing in multiples of ED95 in six dogs instrumented for hemodynamic measurements as well as inspiratory pressure and pulmonary compliance. Cardiopulmonary data were compared before and after the conclusion of a 60- to 90-min GW280430A infusion and in response to subsequent incremental bolus dosing starting with 3.125 + ED95. An adverse response was regarded as an alteration of 10% or greater in any variable. Arterial blood was obtained for histamine anal. before and 1 min after each dose. Results: The ED95 of GW280430A was  $0.064 \pm 0.01$  mg/kg, and stable neuromuscular blockade was maintained with infusion of 0.012 ± 0.002 mg · kg-1 · min-1. With the exception of a late 14% increase in heart rate, there were no cardiopulmonary changes during infusion. Bolus dosing produced no cardiopulmonary change until a decrease in mean arterial pressure was elicited in four of six dogs at 25 + ED95. This response was modest, transient, and associated with a concomitant increase in plasma histamine concentration There were no accompanying changes indicative of direct myocardial depression. pulmonary vasoconstriction, or bronchospasm. Conclusions: These data indicate

# 10/591,174

that GW280430 does not produce demonstrable cardiovascular effects in the anesthetized dog until doses far in excess of the ED95 are administered as a bolus.

IT 213998-46-0, AV 4430A

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(AV 4430A, AV430A; GW280430A does not produce demonstrable cardiovascular effects in anesthetized dog until dose far greater than ED95 administered as rapid i.v. bolus)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-ternahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

2 01-

PAGE 1-B

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10/591.174

- L5 ANSWER 4 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:362286 CAPLUS Full-text
- 141:360521 DN
- TI Preclinical pharmacology of GW280430A (AV430A) in the rhesus monkey and in the cat. A comparison with mivacurium
- ΑU Savarese, John J.; Belmont, Matthew R.; Hashim, Mir A.; Mook, Robert A.; Boros, Eric E.; Samano, Vicente; Patel, Sanjay S.; Feldman, Paul L.; Schultz, Jan-Ake I.; McNulty, Michael; Spitzer, Timothy; Cohn, Douglas L.; Morgan, Philip: Wastila, William B.
- Department of Anesthesiology, Weill Medical College of Cornell University and New York-Presbyterian Hospital, New York, NY, 10021, USA
- Anesthesiology (2004), 100(4), 835-845 SO
- CODEN: ANESAV; ISSN: 0003-3022
- Lippincott Williams & Wilkins PR
- Journal DT LA English

AB

- Background: No replacement for succinylcholine is yet available. GW280430A (AV430A) is a representative of a new class of nondepolarizing neuromuscular blocking drugs called asym. mixed-onium chlorofumarates. It undergoes rapid degradation in plasma by chemical hydrolysis and inactivation by cysteine adduction, resulting in a very short duration of effect. The neuromuscular, cardiovascular, and autonomic pharmacol. of GW280430A is compared herein with that of mivacurium. Methods: Adult male rhesus monkeys and adult male cats were anesthetized with nitrous oxide-oxygen-halothane and chloralosepentobarbital, resp. The neuromuscular blocking properties of GW280430A and mivacurium were compared at a stimulation rate of 0.15 Hz in the extensor digitorum of the foot (monkey) and the tibialis anterior (cat). Sympathetic responses were assayed in the cat in the nictitating membrane preparation, and vagal effects were evaluated in the cat via observation of bradycardic responses after stimulation of the cervical right vagus nerve. Results: GW280430A and mivacurium were equipotent in the monkey (ED95 was 0.06 mg/kg in each case). GW280430A was half as potent as mivacurium in the cat. The total duration of action of GW280430A was less than half that of mivacurium in the monkey; recovery slopes were more than twice as rapid. The 25-75% recovery index of GW280430A did not vary significantly after various bolus doses or infusions, averaging 1.4-1.8 min in the monkey, significantly shorter than the same time interval (4.8-5.7 min) for mivacurium. Dose ratios for autonomic vs. neuromuscular blocking properties in the cat were greater than 25 for both GW280430A and mivacurium. The ratio ED Hist: ED95 Neuromuscular Block in the monkey was significantly greater (approx. 53 vs. 13) for GW280430A, indicating approx. four times less relative prominence of the side effects of skin flushing and decrease of blood pressure, which are associated with release of histamine. Conclusions: These expts. show a much shorter neuromuscular blocking effect and much-reduced side effects in the case of GW280430A vis-avis mivacurium. These results, together with the novel chemical degradation of GW280430A, suggest further evaluation in human subjects.
- 213998-46-0, GW280430A
  - RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (AV430A; GW280430A showed much shorter neuromuscular blocking effect and reduced side effects in anesthetized rhesus monkey, cat and chemical degradation, cardiovascular response compared with mivacurium suggest further evaluation in human subject)
- 213998-46-0 CAPLUS RN
- CN Isoquinolinium, 2-[3-[[(2Z)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5
  - trimethoxyphenyl)isoquinolinio|propoxyl-2-butenyl|oxy|propyl|-1,2,3,4tetrahvdro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-B

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNI 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 5 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:362280 CAPLUS Full-text
- DN 141:343098
- TI Clinical pharmacology of GW280430A in humans
- AU Belmont, Matthew R.; Lien, Cynthia A.; Tjan, Joseph; Bradley, Eleanor;
- Stein, Brenna; Patel, Sanjay S.; Savarese, John J.
- CS Weill Medical College of Cornell University and New York Presbyterian Hospital, New York, NY, 10021, USA
- SO Anesthesiology (2004), 100(4), 768-773
- CODEN: ANESAV; ISSN: 0003-3022
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- AB Background: An ultrashort-acting nondepolarizing neuromuscular blocking agent that could be an alternative to succinylcholine has been the focus of a concerted effort in the field of muscle relaxants. GW280430A showed a

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promising pharmacodynamic profile in preclin. work and a wide margin of safety and so was selected for study in humans. Methods: Thirty-one volunteers participated in this study, which determined the dose producing 95% block (ED95) and the safety and pharmacodynamics of increasing ED95 multiples. Anesthesia was induced and maintained with propofol, midazolam, and fentanyl. Neuromuscular transmission was measured at the adductor pollicis using ulnar nerve stimulation, and responses were recorded continuously by standard mechanomyog, monitoring. Results: The ED95 for GW280430A is 0.19 mg/kg. The time to onset of 90% block ranged from 1.3 to 2.1 min, depending on the dose. Clin. durations ranged from 4.7 to 10.1 min and increased with increasing dose. Five to 95% and 25-75% recovery rates were approx. 7 and 3 min, resp., and were independent of the dose administered. Transient cardiovascular side effects were observed at doses beginning at 3 + ED95 and above and were suggestive of histamine release. Most volunteers receiving 4 + ED95 exhibited plasma histamine concns. indicative of significant histamine release. Conclusions: GW280430A has a rapid onset and ultrashort duration of action. The recovery rate is rapid, predictable, and independent of dose. Doses at least up to 2.5 + ED95 seem to be free of side effects and seem to be able to provide relaxation within 60-90 s.

IT 213998-46-0, GW280430A

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (GM280430A had rapid onset and ultrashort duration of action, recovery rate was rapid, predictable and independent of dose and doses at least up to 2.5 x ED95 seemed to be free of side effect and provided relaxation within 60-90 s in human)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[(2Z)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

●2 C1-

PAGE 1-B

OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 6 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2004:78855 CAPLUS Full-text
- DN 140:350017
- TI Synthesis and anticonvulsant properties of tetrahydroisoquinoline derivatives
- AU Gitto, Rosaria; Caruso, Roberta; Orlando, Valerie; Quartarone, Silvana; Barreca, Maria Letizia; Ferreri, Guido; Russo, Emilio; De Sarro, Giovambattista; Chimirri, Alba
- CS Dipartimento Farmaco-Chimico, Universita di Messina, Messina, 98168, Italy
- SO Farmaco (2004), 59(1), 7-12
- CODEN: FRMCE8; ISSN: 0014-827X PB Editions Scientifiques et Medicales Elsevier
- DT Journal
- LA English
- OS CASREACT 140:350017
- AB a follow up of our previous structure-activity relationship and mol. modeling studies, we synthesized a novel series of 1-aryl-6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivs. as potential non-competitive AMPA receptor antagonists. When tested for their ability to prevent sound-induced seizures in DBA/2 mice, some of these novel compds. showed high anticonvulsant potency.
- IT 682763-23-1P 682763-30-0P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and anticonvulsant properties of tetrahydroisoquinoline derivs. that act as non-competitive AMPA receptor antagonists)

- RN 682763-23-1 CAPLUS
- CN Isoquinoline, 1-(3,5-dichlorophenyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-(CA INDEX NAME)

CN Ethanone, 1-[1-(3,5-dichlorophenyl)-3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl]- (CA INDEX NAME)



- OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
- RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 7 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2003:347314 CAPLUS Full-text
- DN 139:78440
- TI Neuromuscular Blocking Activity and Therapeutic Potential of Mixed-Tetrahydroisoquinolinium Halofumarates and Halosuccinates in Rhesus Monkevs
- AU Boros, Eric E.; Samano, Vicente; Ray, John A.; Thompson, James B.; Jung, David K.; Kaldor, Istvan; Koble, Cecilia S.; Martin, Michael T.; Styles, Virgil L.; Mook, Robert A., Jr.; Feldman, Paul L.; Savarese, John J.; Belmont, Matthew R.; Bigham, Eric C.; Boswell, G. Evan; Hashim, Mir A.; Patel, Sanjay S.; Misowaty, James C.; Bowere, Gary D.; Moseley, Caroline L.; Walsh, John S.; Reese, Mindy J.; Rutkowske, Randy D.; Sefler, Andrea M.; Spitzer, Timothy D.
- CS GlaxoSmithKline Research & Development, Research Triangle Park, NC, 27709,
- SO Journal of Medicinal Chemistry (2003), 46(12), 2502-2515 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal

AR

- LA English OS CASREACT 139:78440
- class of ultra-short-acting nondepolarizing tetrahydroisoguinolinium neuromuscular blockers (NMBs) are described. Bis-onium chlorofumarate 20a with (1R,2S)-benzyltetrahydroisoguinolinium groups was a potent lead compound (ED95 = 0.079 mg/kg) with an ultra-short duration of NMB effect (7.1 min) and a selectivity index (SI: defined as a ratio of the cardiovascular threshold dose to the ED95) similar to that of mivacurium. The mean threshold dose for cardiovascular effects with 20a was .apprx.20 times its ED95 value (SI = 20). A novel mixed-onium analog of was prepared by replacing the benzyltetrahydroisoguinolinium group distal to the fumarate chlorine atom with a (1S,2R)-phenyltetrahydroisoguinolinium moiety. The resulting mixed-onium chlorofumarate 24a displayed good NMB potency (ED95 = 0.063 mg/kg), ultrashort duration of action (5.6 min) and an improved selectivity index (SI = 57). Several other mixed-onium derivs, containing octanedicate (ED95 = 0.103 mg/kg), difluorosuccinate (ED95 = 0.056 mg/kg), and fluorofumarate ( ED95 = 0.137 mg/kg) linkers were also potent, ultra-short-acting NMBs with good to excellent selectivity index values (SI = 37 - 96). Octanedioate was longer

Structure-activity relationships in rhesus monkeys for a novel mixed-onium

acting at higher doses compared to difluorosuccinate and chlorofumarate. Durations of NMB effect following a 0.4 mg/kg bolus dose (100% block) of octanedioate, difluorosuccinate, fluorofumarate and were 16.9, 13.0, and 10.0

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continuous infusion at  $10-20~\mu g/kg/min~(95-100\%~block)$  was .apprx.5 min which is similar to that observed following a 0.2 mg/kg bolus dose of this compound and indicates a lack of cumulative effects. Preliminary studies with chlorofumarate in whole human blood revealed that mixed-onium thiazolidine was the major metabolite and that plasma cholinesterases do not play the primary role in duration of NMB effect. The NMB properties of chlorofumarate in rhesus monkeys led to its clin. evaluation as a possible alternative to succinvlcholine.

IT 213998-54-0P 213998-59-5P 213998-64-1P 213998-65-3P 213998-67-5P 213998-69-7P 213998-71-1P 213998-31-3P 213998-82-4P 213998-83-5P 213998-84-6P 213999-26-9P 213999-39-4P 213999-50-9P 213999-51-0P 213999-52-1P 347384-95-6P 552319-33-2P 552319-36-5P 552319-34-3P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(neuromuscular blocking activity and therapeutic potential of mixed-tetrahydroisoquinolinium halofumarates and halosuccinates in rhesus monkevs)

- RN 213998-54-0 CAPLUS
- CN Isoquinolinium, 2,2'-[[(2Z)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanedlyl)]bis[1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1\*R,2S,2'S)- (9C1) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

RN 213998-59-5 CAPLUS

CN Isoquinolinium, 2-|3-||1,8-dioxo-8-|3-|(1R,2S)-1,2,3,4-tetrahydro-6,7dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio|propoxy|octyl|oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,
dichloride, (1R,2S)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 213998-64-2 CAPLUS

CN Isoquinolinium, 2-[3-[[1,8-dioxo-8-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinollinio]propoxy]octyl]oxy]propyl]-1,2,3,4-

tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-65-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,9-dioxo-9-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]nonyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

●2 C1-

PAGE 1-B

0Me

RN 213998-67-5 CAPLUS

CN Isoquinolinium, 2-[3-[1],6-dioxo-6-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]hexyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 213998-69-7 CAPLUS

CN Isoquinolinium, 2-[3-[[1,7-dioxo-7-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-

trimethoxyphenyl)isoquinolinio]propoxy]heptyl]oxy]propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-71-1 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,10-dioxo-10-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-

dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio|propoxy|decyl|oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,
dichloride,(IR,28)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-81-3 CAPLUS
- CN Isoquinolinium, 2-[3-[((22)-3-chloro-1,4-dioxo-4-[3-(18,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yl]propoxy]-2-buten-1-yl]oxy]propyl]-1,2,,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-82-4 CAPLUS

CN Isoquinolinium, 2-[3-[1(2Z)-2-chloro-1,4-dioxo-4-[3-(1S,2R)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium
2-yl]propoxy]-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)(CA INDEX NAME)

2 c1-

PAGE 1-B

RN 213998-83-5 CAPLUS

CN Isoquinolinium, 2-[3-[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-84-6 CAPLUS
- CN Isoquinolinium, 2-[3-[1(2Z)-2-chloro-1,4-dioxo-4-[3-(1(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yl]propoxy]-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

●2 C1-

PAGE 1-B

RN 213999-26-9 CAPLUS

CN Isoquinolinium, 2-[3-[(2Z)-2-chloro-4-[3-[(1S)-3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2(1H)-isoquinolinyl]propoxy]-1,4-dioxo-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride, hydrochloride (1:1:1), (1R,2S)- (CA INDEX NAME)

PAGE 1-B

- RN 213999-39-4 CAPLUS
- CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-([3,4,5-trimethoxyphenyl)methyl]-, dichloride,([R,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

MeO\_

●2 C1-

PAGE 1-B

RN 213999-50-9 CAPLUS

CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(18,2R)-1,2,3,4-ternahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxylbutoxylpropyl]-1,2,3,4-tetrnahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 213999-51-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-fluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

RN 213999-52-1 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-fluoro-1,4-dioxo-4-[3-(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-((3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO MeO (CH2) 3

2 c1-

PAGE 1-B

- RN 347384-95-6 CAPLUS
- CN 6H-Dibenzo[a,g]guinolizinium, 7=[3-[[(2Z)-2-chloro-1,4-dioxo-4-[3-[(18,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-5,8,13,13a-tetrahydro-1,2,3,9,10,11-hexamethoxy-, dichloride, (78,13aR)-(9C1) (CA INDEX NAME)

PAGE 2-A

- RN 552319-33-2 CAPLUS
- CN Isoquinolinium, 2-[3-[(2S)-2-fluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-((3,4,5-trimethoxyphenyl)methyl)-, dichloride,(IR,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 552319-34-3 CAPLUS

CN Isoquinolinium, 2-[3-[2,2-difluoro-1,5-dioxo-5-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|pentyl|oxy|propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 552319-36-5 CAPLUS

CN Isoquinolinium, 2-[3-[3,3-difluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-

trimethoxypheny1)isoquinolinio]propoxy]butoxy]propy1]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxypheny1)methyl]-, dichloride, (IR.2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

MeO-

IT 213998-45-9P 213998-46-0P 213998-47-1P 213998-48-2P 213998-53-9P 213998-57-3P

213998-58-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(neuromuscular blocking activity and therapeutic potential of mixed-tetrahydroisoquinolinium halofumarates and halosuccinates in rhesus monkeys)

RN 213998-45-9 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-3-chloro-1,4-dioxo-4-[3-{(1S,2R)-1,2,3,4-ternahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,25)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-46-0 CAPLUS
- CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-47-1 CAPLUS
- CN Isoquinolinium, 2,2'-[[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

MeO\_

MeO MeO (CH2) 
$$3$$
 (CH2)  $3$  (CH2)  $3$ 

●2 C1-

PAGE 1-B

- RN 213998-48-2 CAPLUS
- CN Isoquinolinium, 2,2'-[[(2E)-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyohenyl)-, dichloride, (1R,1'R,2S,2'S)-(9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
3  $(CH_2)$ 4  $(CH_2)$ 5  $(CH_2)$ 6  $(CH_2)$ 7  $(CH_2)$ 7  $(CH_2)$ 8  $(CH_2)$ 9  $(CH_2)$ 9

●2 C1-

PAGE 1-B

- RN 213998-53-9 CAPLUS
- CN Isoquinolinium, 2,2'-[[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (15,1'5,2R,2'R)- (9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

RN 213998-57-3 CAPLUS

CN Isoquinolinium, 2-[3-[[(2R)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 c1-

PAGE 1-B

RN 213998-58-4 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[{1R,2S}-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

IT 198401-05-7P 220408-26-4P 552319-26-3P 552319-26-5P 552319-32-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(neuromuscular blocking activity and therapeutic potential of mixed-tetrahydroisoquinolinium halofumarates and halosuccinates in rhesus monkeys)

RN 198401-05-7 CAPLUS

N Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 220408-26-4 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 552319-26-3 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R)- (CA INDEX NAME)

Absolute stereochemistry.

● C1 -

- RN 552319-28-5 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1S)- (CA INDEX NAME)

Absolute stereochemistry.

C1-

- RN 552319-32-1 CAPLUS
- CN 2(1H)-Isoquinolinepropanol, 3,4-dihydro-6,7-dimethoxy-1-(3,4,5trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry.

- OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
  RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 8 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2003:281089 CAPLUS Full-text
- DN 139:180218
- TI A one-pot synthesis of (±) cryptostylines
- AU Ruchirawat, Somsak; Bhavakul, Vanida; Chaisupakitsin, Malinee
- CS Chulabhorn Research Institute, Bangkok, 10210, Thailand
- SO Synthetic Communications (2003), 33(4), 621-625
- CODEN: SYNCAV; ISSN: 0039-7911 PB Marcel Dekker, Inc.
- DT Journal
- LA English
- OS CASREACT 139:180218

G

- AB A one-pot synthesis of cryptostylines I (R1 = H, OMe; R2, R3 = Me; R2-R3 = CH2) via the Pictet-Spengler reaction is reported.
- IT 22324-83-0P
  - RL: SPN (Synthetic preparation); PREP (Preparation)
    (one-pot preparation of (±) cryptostyline alkaloids from
    homoveratrylamine and aromatic aldehydes via Pictet-Spengler reaction and
    N-methylation with formaldehyde)
- RN 22324-83-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)



- OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
- RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 9 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:704029 CAPLUS Full-text
- DN 138:231172
- TI The pharmacoology of GW280430A: a new nondepolarizing neuromuscular blocking agent
- AU Lien, Cynthia A.
- CS Department of Anesthesiology, New York Presbyterian Hospital, Weill Medical College of Cornell University, New York, NY, USA
- SO Seminars in Anesthesia, Perioperative Medicine and Pain (3002), 21(2), 86-91
- CODEN: SAPPFJ PB W. B. Saunders Co.
- DT Journal: General Review
- LA English
- AB A review. GW280430A is a new nondepolarizing neuromuscular blocking agent, which is different from any other used either currently or in the past. It is a potent nondepolarizing agent that has a rapid onset of effect comparable in early volunteer trials to that of succinylcholine. Its unique chemical structure is responsible not only for its potency and nondepolarizing

neuromuscular blocking activity but also for its means of elimination from the plasma. Although other relaxants, such as mivacurium, undergo hydrolysis by plasma esterases, no other compound undergoes chemical hydrolysis and cysteine adduction. These reactions happen extremely quickly and are likely responsible for the ultrashort duration of action of GW280430A. If the results of further trials of this compound in patients undergoing surgical procedures are similar to those of the earlier volunteer trials, GW280430A promises to be the nondepolarizing equivalent of succinylcholine. Its development may allow for greater safety with the use of nondepolarizing neuromuscular blocking agents. With its ultrashort duration of action, unacceptable levels of neuromuscular blockade after extubation of the trachea and all associated adverse sequelae, such as decreased hypoxic drive to breathe, respiratory failure, and increased incidence of aspiration, may become things of the past.

IT 213998-46-0, GW 280430A

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmacol. of new nondepolarizing neuromuscular blocking agent GW280430A in laboratory animals and humans)

RN 213998-46-0 CAPLUS CN Isoquinolinium, 2-[

Isoquinolinium, 2-[3-[[(22)-2-chloro-1, 4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|-2-butenyl]oxy|propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

PAGE 1-B

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 10 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:226386 CAPLUS Full-text
- DN 137:299691
- TI Preformulation studies for an ultrashort-acting neuromuscular blocking agent GW280430A. I. Buffer and cosolvent effects on the solution stability
- AU Zhu, Haijian; Meserve, Kathy; Floyd, Alison
- CS GlaxoSmithKline Inc., Research Triangle Park, NC, 27709, USA
- SO Drug Development and Industrial Pharmacy (2002), 28(2), 135-142 CODEN: DDIPD8; ISSN: 0363-9045
- PB Marcel Dekker, Inc.
- DT Journal
- LA English
- AB GW280430A is an ultrashort-acting neuromuscular blocking agent targeted at muscle relaxation to facilitate surgical intubation. The objective of this study was to study the buffer and cosolvent effects on the solution stability of GW280430A. The buffer catalytic effect was examined in citrate, malate, tartrate, and glycine by measuring the rate of degradation of GW280430A (0.2 mg/mL) at constant pH (3), ionic strength (0.15M), and various buffer concns. (0.01-0.05M). The temperature dependence of the buffer catalytic effect and the degradation of the GW280430A in cosolvent (ethanol, propylene glycol, polyethylene glycol 400, N,N-dimethylacetamide)/water mixts. were studied at 40, 50, and 60°. The loss of parent drug was monitored by reverse-phase HPLC. The degradation of GW280430A followed first-order kinetics in all buffer solns. Significant buffer-catalyzed hydrolysis of GW280430A was observed with citrate, tartrate, and malate buffers, but not in qlycine-buffered solns. The activation energies in all buffered drug solns, ranged from 70 to 80 kJ/mol and decreased with increasing buffer concentration GW280430A degradation was primarily through ester hydrolysis and followed first-order kinetics in aqueous solns. In cosolvent/water mixts., new degradation products were observed, indicating a chemical reaction between GW280430A and cosolvents. The reaction activation energies in the cosolvent/water mixts. ranged 75-85 kJ/mol, with the longest t0.9 at 5° equal to approx. 12 mo and at 25° equal to 36 days. Consideration should be given to the incorporation of glycine or a low concentration of citrate, malate, or tartrate buffer in the parenteral formulation development of GW280430A. Cosolvents prolonged the predicted t0.9 for GW280430A in solution, but the enhancement was not significant enough to pursue a liquid formulation.
- IT 213998-46-0, GW 280430A

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(buffer and cosolvent effects on solution stability of neuromuscular blocker GW280430A)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[1(2Z)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|-2-butenyl)oxy|propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

MeO OMe OMe OMe OMe OMe

2 C1-

PAGE 1-B

- OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 11 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2002:115984 CAPLUS Full-text
- DN 137:284090
- TI Solid state characterization of an neuromuscular blocking agent-GW280430A
- AU Zhu, Haijian; Sacchetti, Mark
- CS GlaxoSmithKline Inc., Research Triangle Park, NC, 27709, USA
- SO International Journal of Pharmaceutics (2002), 234(1-2), 19-23 CODEN: IJPHDE: ISSN: 0378-5173
- PB Elsevier Science B.V.

- DT Journal
- LA English
- GW280430A is an ultrashort-acting neuromuscular blocking agent and is targeted AB for muscle relaxation as part of the intubation surgical procedure. The objective of this study was to perform solid state characterization on GW280430A and to evaluate the relationship between water content and glass transition temperature (Tq). GW280430A was characterized by differential scanning calorimetry, thermogravimetric anal., powder x-ray diffraction (PXRD), microscopy and moisture sorption. The effect of water content on the To of GW280430A was evaluated by equilibrating the material over saturated salt solns, at a range of relative humidities (6.4-72.6%) and determining the To by DSC using hermetically sealed aluminum pans. GW280430A undergoes dehydration at 40°, glass transition at 130° and decomposition at 190° by DSC. By PXRD and moisture sorption, GW280430A is an amorphous material and deliquesces at about 70% RH at room temperature Water acts as a potent plasticizer for GW280430A and the To decreases significantly as the water content increases. No measurable decomposition of GW280430A was observed
- IT 213998-46-0, GW 280430A

after 4 wk at 40°/75% RH.

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(solid state characterization of an neuromuscular blocking agent GW280430A)

- RN 213998-46-0 CAPLUS
- CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-{(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

●2 C1-

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 12 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2001:472522 CAPLUS Full-text
- DN 135:66254
- TI pharmaceutical formulations containing histamine releasers
- IN Floyd, Alison G.; Hashim, Mir A.; Lin, Peiyuan; Mook, Robert A.; Sefler, Andrea
- PA Glaxo Group Ltd., UK
- SO PCT Int. Appl., 91 pp. CODEN: PIXXD2

WO 2000-US33772 W

- DT Patent
- LA English

FAN.CNT 1

									APPLICATION NO.										
PI											WO 2	000-	US33	772		2	0001	213 <	-
	WO	2001																	
		W:						ΑU,											
								DM,											
								JP,											
								MK,											
						SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
				ZA,															
		RW:						MZ,											
								GB,										BF,	
								GA,											
											CA 2	000-	2394	794		2	0001	213 <	-
		2394																	
											EP 2	000-	9843	05		2	0001	213 <	-
	EP	1239																	
		R:											LI,	LU,	NL,	SE,	MC,	PT,	
								RO,											
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		7798																	
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		2284																	
		2003									US 2	002-	1497	22		2	0020	513 <	-
		6911																	
											MX 2	002-	6266			2	0020	521 <	-
PRAI	US	1999	-171	696P		P		1999	1222										

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

20001213

- AB The invention relates to pharmaceutical formulations and methods for preparing pharmaceutical formulations of histamine releasers. The present invention provides methods for determining the concentration of physiol. acceptable excipient for use in the formulations of invention. Methods for suppressing pharmaceutically-induced histamine release by administering the formulations to an animal are also provided. A kit useful for preparing pharmaceutical formulations of histamine releasers is also described. The percent inhibition of histamine release by formulations containing a tetrahydroisoquinoline derivative and citric acid, an excipient (12.5 mg/mL), at pH 3 was 90.8.
  - 213998-46-0 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
  - (pharmaceutical formulations containing histamine releasers)
- RN 213998-46-0 CAPLUS
- CN Isoquinolinium, 2-[3-[[(2D)-2-chloro-1, 4-dioxo-4-[3-[(1S,2R)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio[propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

2 C1-

PAGE 1-B

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2001:290361 CAPLUS Full-text

135:77006 DN

Stereocontrolled Synthesis of cis-Dibenzoquinolizine Chlorofumarates: Curare-Like Agents of Ultrashort Duration

ΑU Kaldor, Istvan; Feldman, Paul L.; Mook, Robert A., Jr.; Ray, John A.; Samano, Vicente; Sefler, Andrea M.; Thompson, James B.; Travis, Benjamin R.; Boros, Eric E.

Division of Medicinal Chemistry, GlaxoSmithKline Research & Development, Research Triangle Park, NC, 27709, USA

SO Journal of Organic Chemistry (2001), 66(10), 3495-3501 CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

Journal DT

LA English

OS. CASREACT 135:77006

AB Cis-Dibenzoquinoliziniumpropanols were prepared stereoselectively and were transformation into bis- and mixed-onium chlorofumarates. The title compds. displayed curare-like effects of ultrashort duration in rhesus monkeys.

IT

RL: RCT (Reactant); RACT (Reactant or reagent) (stereocontrolled synthesis of cis-dibenzoquinolizine chlorofumarates, curare-like agents of ultrashort duration)

RN 213999-53-2 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1S,2R)- (CA INDEX NAME)

Absolute stereochemistry.

347384-95-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (stereocontrolled synthesis of cis-dibenzoquinolizine chlorofumarates, curare-like agents of ultrashort duration)

RN 347384-95-6 CAPLUS

CN 6H-Dibenzo[a, g]guinolizinium, 7-[3-[[(2Z)-2-chloro-1, 4-dioxo-4-[3-[(1S, 2R)-1, 2, 3, 4-tetrahydro-6, 7-dimethoxy-2-methyl-1-[(3, 4, 5trimethoxyphenyl)methyl]isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-5,8,13,13a-tetrahydro-1,2,3,9,10,11-hexamethoxy-, dichloride, (7S,13aR)-

#### (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 2-A

●2 C1-

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)
RE.CNT 29 THERE ARE 29 CITED REFRENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 14 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2000:553442 CAPLUS Full-text
- DN 133:168383
- TI Pharmaceutical compositions containing nicotine or a ligand of nicotine receptors and a monamine oxidase inhibitor and their use for treating tobacco withdrawal symptoms
- IN Caille, Dominique; George, Pascal; Jegham, Samir; Robineau, Pascale; Scatton, Bernard; Zivkovic, Branimir
- PA Sanofi-Synthelabo, Fr.
- SO PCT Int. Appl., 37 pp. CODEN: PIXXD2
- DT Patent
- LA French
- DA FIENC

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PI	WO	2000	0458	46		A1		2000	0810		WO 2	000-	FR19	3		2	0000	128 <
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			CZ,	DE,	DK,	DM,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW	

		RW:	GH,				MW, GB,												
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				CI,	CM,		GN,												
	FR	2788	982			A1	- 2	2000	0804		FR 1	999-	1144			1	9990	202	<
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	CA	2361	437			A1	- 2	2000	0810		CA 2	000-	2361	437		2	0000	128	<
	EP	1150	715			A1	- 1	2001	1107		EP 2	000-	9016	60		2	0000	128	<
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FΙ,	RO											
	HU	2002	0012	79		A2		2002	0928		HU 2	002-	1279			2	0000	128	<
	JP	2002	5363	42		T		2002	1029		JP 2	000-	5969	65		2	0000	128	<
	MX	2001	0078	12		A	- 2	2002	0108		MX 2	001-	7812			2	0010	802	<
PRAI	FR	1999	-114	4		A		1999	0202										
	WO	2000	-FR1	93		W	- 2	2000	0128										

OS MARPAT 133:168383 AB The invention con

The invention concerns novel pharmaceutical compns. containing nicotine or a ligand of nicotine receptors and a monamine oxidase inhibitor designed for treating tobacco withdrawal symptoms. A bilayer tablet contained befloxatone 5, lactose 66, microcryst. cellulose 20, povidone 4, crospovidone 4, and magnesium stearate 1% in the first layer, and nicotine polarcrilex 5, microcryst. cellulose 20 povidone 4, hydroxypropyl Me cellulose 25, magnesium stearate 1, and lactose q.s. 100% in the second layer.

IT 213998-46-0, GW 280430

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing nicotine or ligand of nicotine receptors and monamine oxidase inhibitor and their use for treating tobacco withdrawal symptoms)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1, 4-dioxo-4-[3-[(1S,2R)-1,2,3,4-terahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

PAGE 1-B

osc.g THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS) RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5

ANSWER 15 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

1999:757502 CAPLUS Full-text AN

DN 132:107858

- ΤТ Synthesis of Ultra-Short-Acting Neuromuscular Blocker GW 0430: A Remarkably Stereo- and Regioselective Synthesis of Mixed Tetrahydroisoquinolinium Chlorofumarates
- Samano, Vicente; Ray, John A.; Thompson, James B.; Mook, Robert A., Jr.; AU Jung, David K.; Koble, Cecilia S.; Martin, Michael T.; Bigham, Eric C.; Regitz, Craig S.; Feldman, Paul L.; Boros, Eric E.
- Department of Chemistry, Glaxo Wellcome Research and Development, Research CS Triangle Park, NC, 27709, USA
- SO Organic Letters (1999), 1(12), 1993-1996 CODEN: ORLEF7; ISSN: 1523-7060
- PB American Chemical Society
- DT Journal
- LA English
- os CASREACT 132:107858
- AB The stereo- and regioselective synthesis of ultra-short-acting nondepolarizing neuromuscular blocker GW 0430 is described. Key steps involved the enantioselective transfer hydrogenation of an imine employing Novori's catalyst, stereoselective crystallization and methanolysis of trans-betaines, and stereo- and regioselective trans elimination of hydrogen chloride. The latter transformation allowed complete control of the position of the chloro substituent and stereochem. at the double bond of the linker.
- 213998-45-9P 213998-46-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(stereo- and regioselective preparation of mixed tetrahydroisoguinolinium chlorofumarates)

213998-45-9 CAPLUS RN

CN Isoquinolinium, 2-[3-[[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

OMe

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

■2 c1-

PAGE 1-B

IT 22325-16-2P 213999-53-2P 213999-54-3P 214191-49-8P 255821-84-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(stereo- and regioselective preparation of mixed tetrahydroisoquinolinium chlorofumarates)  $\begin{tabular}{ll} \hline \end{tabular}$ 

RN 22325-16-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 213999-53-2 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (15,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 213999-54-3 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-2-[3-(sulfoxy)propyl]-1-(3,4,5-trimethoxyphenyl)-, inner salt, (1S,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 214191-49-8 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (15,25)- (CA INDEX NAME)

Absolute stereochemistry.

RN 255821-84-2 CAPLUS

CN Formic acid, compd. with (1S)-1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)isoquinoline (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 32886-69-4 CMF C20 H25 N O5

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 O2

O=== CH - OH

OSC.G 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 16 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1999:173738 CAPLUS Full-text
- DN 130:281969
- TI Bis- and Mixed-Tetrahydroisoquinolinium Chlorofumarates: New Ultra-Short-Acting Nondepolarizing Neuromuscular Blockers. [Erratum to

document cited in CA130:168224]

- AU Boros, Eric E., Bigham, Eric C., Boswell, G. Evan; Mook, Robert A., Jr.; Patel, Sanjay S.; Savarese, John J.; Ray, John A.; Thompson, James B.; Hashim, Mir A.; Wisowaty, James C.; Feldman, Paul L.; Samano, Vicente
- CS Glaxo Wellcome Research and Development, Research Triangle Park, NC, 27709, USA
- SO Journal of Medicinal Chemistry (1999), 42(6), 1114 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- AB On page 207, under Neuromuscular Pharmacol., sentence 1, line 3, "or" should be replaced with "and": Rhesus monkeys (adult males, 8-15 kg) were anesthetized with ketamine (5 mg/kg, i.m.) and sodium pentobarbital (205 mg/kg, iv).
  - 213998-45-9P 213998-46-0P 213998-47-1P 213998-48-2P 213998-53-9P 213998-57-3P

213998-58-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(bis- and mixed-tetrahydroisoquinolinium chlorofumarates as

- ultra-short-acting nondepolarizing neuromuscular blockers (Erratum))  ${\tt RN} \quad {\tt 213998-45-9} \quad {\tt CAPLUS}$
- CN Isoquinolinium, 2-[3-[{(2)-3-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CR INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

2 C1-

PAGE 1-B

RN 213998-47-1 CAPLUS

CN Isoquinolinium, 2,2'-[|(27)-2-chloro-1,4-dioxo-2-butene-1,4-diyl)bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-1(3,4,5-5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

RN 213998-48-2 CAPLUS

CN Isoquinolinium, 2,2'-[(2E)-1,4-dioxo-2-butene-1,4-diy1]bis(oxy-3,1propanediy1)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

MeO\_

MeO MeO 
$$(CH_2)$$
  $(CH_2)$   $(C$ 

●2 C1-

PAGE 1-B

- RN 213998-53-9 CAPLUS
- CN Isoquinolinium, 2,2'-[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (15,1'5,2R,2'R)- (9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

RN 213998-57-3 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-terahydro-6,7-dimethoxy-2-methyl-1-[3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-58-4 CAPLUS
- CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[{(1R,2S)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

2 c1-

PAGE 1-B

IT 213999-53-2 220408-26-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(bis- and mixed-tetrahydroisoquinolinium chlorofumarates as

ultra-short-acting nondepolarizing neuromuscular blockers (Erratum))

RN 213999-53-2 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (18,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 220408-26-4 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.

# OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

- L5 ANSWER 17 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1999:8655 CAPLUS Full-text
- DN 130:168224
- TI Bis- and Mixed-Tetrahydroisoquinolinium Chlorofumarates: New Ultra-Short-Acting Nondepolarizing Neuromuscular Blockers
- AU Boros, Eric E.; Bigham, Eric C.; Boswell, G. Evan; Mook, Robert A., Jr.; Patel, Sanjay S.; Savarese, John J.; Ray, John A.; Thompson, James B.; Hashim, Mir A.; Wisowaty, James C.; Feldman, Paul L.; Samano, Vicente
- CS Glaxo Wellcome Research and Development, Research Triangle Park, NC, 27709, USA
- SO Journal of Medicinal Chemistry (1999), 42(2), 206-209 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- 0.7

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- AB Title compds. such as I (n = 0, 1; X = H, Cl) were prepared by reaction of the isoquinolinium headgroups with chlorofumaryl or fumaryl chloride in dichloroethane. Potency values (ED95), onset times, and duration of neuromuscular blocking action were measured in rhesus monkeys.
- IT 213998-45-9P 213998-46-0P 213998-47-1P 213998-48-2P 213998-53-9P 213998-57-3P 213998-58-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

study); PREP (Preparation)
(bis- and mixed-tetrahydroisoguinolinium chlorofumarates as
ultra-short-acting nondepolarizing neuromuscular blockers)

- RN 213998-45-9 CAPLUS CN Isoquinolinium, 2-[3-[[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4
  - tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,23)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[1(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

PAGE 1-B

RN 213998-47-1 CAPLUS

CN Isoquinolinium, 2,2'-[[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diy]]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

- RN 213998-48-2 CAPLUS
- CN Isoquinolinium, 2,2'-[[(2E)-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanedlyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)-(9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
3  $(CH_2)$ 4  $(CH_2)$ 5  $(CH_2)$ 6  $(CH_2)$ 7  $(CH_2)$ 7  $(CH_2)$ 8  $(CH_2)$ 9  $(CH_2)$ 9

●2 C1-

PAGE 1-B

- RN 213998-53-9 CAPLUS
- CN Isoquinolinium, 2,2'-[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (15,1'5,2R,2'R)- (9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

- RN 213998-57-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-terahydro-6,7-dimethoxy-2-methyl-1-[3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-58-4 CAPLUS
- CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[{(1R,2S)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

2 c1-

PAGE 1-B

IT 213999-53-2 220408-26-4

RL: RCT (Reactant); RACT (Reactant or reagent)
(bis- and mixed-tetrahydroisoquinolinium chlorofumarates as
ultra-short-acting nondepolarizing neuromuscular blockers)

213999-53-2 CAPLUS

RN

CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (18,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- 220408-26-4 CAPLUS RN
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropy1)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.

● c1-

- OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS) RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 18 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1998:672522 CAPLUS Full-text
- DN 129:275845
- OREF 129:56249a
- TI Substituted isoquinolines as ultra short acting neuromuscular blockers
- IN Bigham, Eric Cleveland; Boswell, Grady Evan; Savarese, John Joseph;
  - Swaringen, Roy Archibald, Jr.; Patel, Sanjay Shashikant; Boros, Eric Eugene; Mook, Robert Anthony, Jr.; Samano, Vincente
- PA Glaxo Group Limited, UK; Cornell Research Foundation Inc.
- PCT Int. Appl., 110 pp. SO
- CODEN: PIXXD2
- Patent DT
- LA English

FAN	.CNT	2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9842675	A1	19981001	WO 1998-EP1652	19980323 <

## 10/591,174

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W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 129:275845 GI

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Ultra short acting neuromuscular blocking agents I [q, t = 0-4; X1, X2 = halo; AB ha, hb = 0-2; Z1, Z2 = H, C1-6 alkyl, C2-6 alkenyl or C2-6 alkynyl with the proviso that Z1 and Z2 are not both hydrogen; Y1, Y2, Y3, Y4 = H, halo, C1-3 alkoxy; m, p = 1-6; n, r = 0-4; with the proviso that if ha and hb are both 0, then r is 0 and n is 0 to 2; R1-R14 = H, halo, C1-3 alkoxy, or R2 and R3 together with the carbon atoms to which they are bonded, R5 and R6 together with the carbon atoms to which they are bonded, R9 and R10 together with the carbon atoms to which they are bonded, R12 and R13 together with the carbon atoms to which they are bonded, may independently form a methylenedioxy or

ethylenedioxy moiety contained in a five- or six-membered ring; W1, W2 = C; A is a pharmaceutically acceptable anion], which are useful as skeletal muscle relaxants during emergency intubation procedures, routine surgery and post-operative settings, are disclosed. E.g., (Z)-2-chloro-1-(3-[(15,2R)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-1,2,3,4-tetrahydro-2-isoquinoliniolpropyl)-4-<math>(3-(1R,2S)-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-2-isoquinoliniolpropyl)-2-butenedioate dichloride was prepared

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted isoquinolines as ultra short acting neuromuscular blockers)

RN 213998-45-9 CAPLUS

CN

Isoguinolinium, 2-[3-[[(25)-3-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|-2-butenyl|oxy|propyy|-1,2,3,4-trimethoxyphenyl)isoquinolinio|propoxy|-2-butenyl|oxy|propyy|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2,3,4-trimethoxyphenyl|-1,2

trimethoxyphenyl)isoquinolinio|propoxy|-2-butenyl]oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

MeO\_

●2 c1-

PAGE 1-B

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

RN 213998-47-1 CAPLUS

CN Isoquinolinium, 2,2'-[(22)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis(1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-A

MeO\_

c1-

PAGE 1-B

- RN 213998-48-2 CAPLUS
- $\texttt{CN} \quad \texttt{Isoquinolinium, 2,2'-[[(2E)-1,4-\texttt{dioxo-2-butene-1,4-diy1]bis(oxy-3,1-dioxo-2-butene-1,4-diy1]bis(oxy-3,1-dioxo-2-butene-1,4-diy1]bis(oxy-3,1-dioxo-2-butene-1,4-diy1]bis(oxy-3,1-dioxo-2-butene-1,4-diy1]bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-diy1)bis(oxy-3,1-dioxo-2-butene-1,4-d$

propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (1R,1'R,2S,2'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A

MeO\_

MeO 
$$(CH_2)_3$$
  $(CH_2)_3$   $(CH_2)_3$   $(CH_2)_3$   $(CH_2)_3$ 

●2 C1-

PAGE 1-B

- RN 213998-49-3 CAPLUS
- CN Isoquinolinium, 2,2'-[(1,8-dioxo-1,8-octanediyl)bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (IR,1'R,2S,2'S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

RN 213998-50-6 CAPLUS

CN Isoquinolinium, 2,2'-[(1,8-dioxo-1,8-octanediy1)bis(oxy-3,1-propanediy1)bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methy1-1-(3,4,5-trimethoxypheny1)-, dichloride, (1R,1'R,2R,2'S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RN 213998-51-7 CAPLUS

CN Isoquinolinium, 2,2'-[(1,8-dioxo-1,8-octanediyl)bis(oxy-3,1-propanediyl)bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyohenyl)-, dichloride, (15,1'5,2R,2'R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 213998-52-8 CAPLUS

CN Isoquinolinium, 2,2'-[(1,8-dioxo-1,8-octanediy1)bis(oxy-3,1-propanediy1)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methy1-1-(3,4,5-trimethoxypheny1)-, dichloride, (15,1'5,2R,2'5)- (9CI) (CA INDEX NAME)

## 10/591,174

PAGE 1-B

- RN 213998-53-9 CAPLUS
- CN Isoquinolinium, 2,2'-[[(27)-2-chloro-1,4-dioxo-2-butene-1,4-diy1]bis(oxy-3,1-propanediy1)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methy1-1-(3,4)-5-trimethoxypheny1)-, dichloride, (15,1'5,2R,2'R)- (9CI) (CA INDEX NAME)

MeO\_

MeO 
$$(CH_2)$$
  $(CH_2)$   $(CH_2)$ 

●2 C1-

PAGE 1-B

- RN 213998-54-0 CAPLUS
- CN Isoquinolinium, 2,2'-[[(2Z)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-terrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (IR,1'R,2S,2'S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-55-1 CAPLUS
- CN Isoquinolinium, 2,2'-[[(2Z)-2-chloro-1,4-dioxo-2-butene-1,4-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-terrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride, (15,1'5,2R,2'R)-(9C1) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-57-3 CAPLUS

CN Isoquinolinium, 2-[3-[[(2R)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-58-4 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[{1R,2S}-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[{(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9C1) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-59-5 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,8-dioxo-8-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]octyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

0Me

RN 213998-62-0 CAPLUS

CN Isoquinolinium, 1-((3,4-dimethoxyphenyl)methyl]-2-[3-[[1,8-dioxo-8-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|octyl|oxy|propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Page 82 of 219

PAGE 1-B

RN 213998-63-1 CAPLUS

CN Isoquinolinium, 1-[(3,4-dimethoxyphenyl)methyl]-2-[3-[[1,8-dioxo-8-[3-[(18,25)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]octyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-64-2 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,8-dioxo-8-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-

dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio|propoxy|octy1|oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,
dichloride, (1R,28)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-65-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,9-dioxo-9-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]nonyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[[3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9C1) (CA INDEX NAME)

●2 C1-

PAGE 1-B

0Me

RN 213998-66-4 CAPLUS

CN Isoquinolinium, 2-[3-[[1,9-dioxo-9-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]nonyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Page 85 of 219

PAGE 1-B

RN 213998-67-5 CAPLUS

CN Isoquinolinium, 2-[3-[[1,6-dioxo-6-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]hexyl]oxy]propyl]-1,2,3,4-

trimethoxyphenyl)isoquinolinio]propoxy]hexyl]oxy]propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-68-6 CAPLUS
- ${\tt CN Isoquinolinium, 2-[3-[[1,6-dioxo-6-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-1]]]} \\$

dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio|propoxy|hexyl]oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,
dichloride,(1R,28)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-69-7 CAPLUS
- CN Isoquinolinium, 2-[3-[[1,7-dioxo-7-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-timethoxyphenyl)isoquinolinio]propoxy]heptyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[[3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9C1) (CA INDEX NAME)

●2 C1-

PAGE 1-B

0Me

RN 213998-70-0 CAPLUS

CN Isoquinolinium, 2-[3-[[1,7-dioxo-7-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]heptyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 213998-71-1 CAPLUS

CN Isoquinolinium, 2-[3-[[1,10-dioxo-10-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]decyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (IR,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

0Me

- RN 213998-72-2 CAPLUS
- ${\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10])}] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10])}] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10])}] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10]]}] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10]]}] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-10]]}] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3]]}] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2,3]]}] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2]]}] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2]]}] ] } \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-{\tt dioxo-10-[3-[(1S,2S)-1,2]]}] ] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]]] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]]] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] ] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] ] } ] \\ {\tt CN Isoquinolinium, 2-[3-[[1,10-[1]]] ] } ] \\ {\tt CN Isoquinolinium, 2-[[1,10-[1]]] } \\ {\tt CN Isoquinolinium, 2-[[1,10-[1]]] } ] \\ {\tt CN Isoquinolini$

dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)isoquinolinio|propoxy|decyl|oxy|propyl]-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,
dichloride,(IR,28)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

- RN 213998-75-5 CAPLUS
- CN Isoguinolinium, 2=[3-[[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-terahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]lisoguinolinio]propoxy]-2-butenyl]oxy]propyl]1,2,3,4-tetrahydro-6,7-dimethoxy-2-(2-propenyl)-1-(3,4,5-trimethoxyphenyl), dichloride, (1S,2S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-76-6 CAPLUS
- CN Isoquinolinium, 2-[3-[((22)-2-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-trahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]isoquinolinio]propoxy]-2-butenyl]oxy]propyl]1,2,3,4-tetrahydro-6,7-dimethoxy-2-(2-propenyl)-1-(3,4,5-trimethoxyphenyl)dichloride, (1S,2S)-(9CI) (CA INDEX NAME)

2 C1-

PAGE 1-B

ОМе

- RN 213998-77-7 CAPLUS
- CN Isoquinolinium, 2-[3-[((22)-3-chloro-4-[3-[(1R,2R)-1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-1-methylisoquinolinio]propoxy]-1,4-dloxo-2-butenylloxy[propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride,(1S,2R)-(SCI) (CR INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-78-8 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-2-chloro-4-[3-[(1R,2R)-1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methylisoquinolinio]propoxy]-1,4-dioxo-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride,(1S,2R)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-79-9 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-3-chloro-4-[3-[(1R,2S)-1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-1-methylisoquinolinio]propoxy]-1,4-dioxo-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride,(1S,2R)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-80-2 CAPLUS
- CN Isoquinolinium, 2-[3-[{(22)-2-chloro-4-[3-[(1R,25)-1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methylisoquinolinio]propoxy]-1,4-dloxo-2-butenylloxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, dichloride,(1S,2R)-(SCI) (CR INDEX NAME)

MeO\_

●2 c1-

PAGE 1-B

RN 213998-81-3 CAPLUS

CN Isoquinolinium, 2-[3-[((2Z)-3-chloro-1,4-dioxo-4-[3-(1S,2R)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (IR,2S)(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-82-4 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-chloro-1,4-dioxo-4-[3-(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

2 c1-

PAGE 1-B

RN 213998-83-5 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-3-chloro-1,4-dioxo-4-[3-(1R,25)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-84-6 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

2 C1-

PAGE 1-B

RN 213999-19-0 CAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinolinium, 6-[3-[[(2Z)-3-chloro-1,4-dioxo-4-[3-[(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-buten-1-yl]oxy]propyl]-5,6,7,8-tetrahydro-6-methyl-5-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (SR,6S)- (CA INDEX NAME)

PAGE 1-B

MeO-

RN 213999-20-3 CAPLUS

CN 1,3-Dioxolo[4,5-g]isoquinolinium, 6-[3-[[(2Z)-2-chloro-1,4-dioxo-4-[3-[(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-buten-1-yl]oxy]propyl]-5,6,7,8-tetrahydro-6-methyl-5-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (SR,6S)- (CA INDEX NAME)

MeO-

PAGE 1-B

RN 213999-24-7 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213999-25-8 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-3-chloro-1,4-dioxo-4-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213999-26-9 CAPLUS

CN Isoquinolinium, 2-[3-[(2Z)-2-chloro-4-[3-[(1S)-3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-2(1H)-isoquinolinyl]propoxy]-1,4-dioxo-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride, hydrochloride (1:1:1), (1R,2S)- (CA INDEX NAME)

PAGE 1-B

RN 213999-27-0 CAPLUS

CN Isoquinolinium, 2-[3-[[(2E)-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213999-28-1 CAPLUS

CN Isoquinolinium, 2-[3-e]archloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-

6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213999-31-6 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-chloro-4-[3-[(18,25)-2-chtyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]1,4-dioxo-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,28)- (9CI) (CA INDEX NAME)

2 C1-

PAGE 1-B

RN 213999-32-7 CAPLUS

CN Isoquinolinium, 2-[3-[{(2S)-2-chloro-4-[3-[(1S,2R)-2-chtyl-1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]1,4-dioxo-2-butenyl[oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213999-38-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-2-bromo-1,4-dioxo-4-[3-[(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dibromide, (1R,2S)- (9C1) (CA INDEX NAME)

●2 Br-

PAGE 1-B

- RN 213999-39-4 CAPLUS
- CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride,(IR,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

оме

RN 213999-40-7 CAPLUS

CN Isoquinolinium, 2-[3-[3,3-difluoro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride,(1R,2S)-(SCI) (CA INDEX NAME)

Page 111 of 219

PAGE 1-B

RN 213999-41-8 CAPLUS

CN Isoquinolinium, 2-[3-[3,3-difluoro-1,4-dioxo-4-[3-[(1R,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-((3,4,5-trimethoxyphenyl)methyl]-, dichloride,(IR,2S)-(9CI) (CA INDEX NAME)

PAGE 1-B

RN 213999-42-9 CAPLUS

CN Isequinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy|butoxy|propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride,(IR,2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

MeO\_

PAGE 1-B

RN 213999-46-3 CAPLUS

CN Isoquinolinium, 2-[3-[2-fluoro-1, 4-dioxo-4-[3-[(18,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio[propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)-(SCI) (CR INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

CN Isoquinolinium, 2-[3-[2-fluoro-1,4-dioxo-4-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)-(SCI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

MeO\_

●2 C1-

PAGE 1-B

OMe

- RN 213999-50-9 CAPLUS
- CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yl]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

PAGE 1-B

RN 213999-51-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-fluoro-1,4-dioxo-4-[3-[(18,2R)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

2 C1-

PAGE 1-B

RN 213999-52-1 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-fluoro-1,4-dioxo-4-[3-(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

OMe

●2 C1-

PAGE 1-B

IT 22325-16-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of substituted isoquinolines as ultra short acting neuromuscular blockers)

RN 22325-16-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, (IS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

## 10/591.174

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted isoquinolines as ultra short acting neuromuscular blockers)

- RN 213999-53-2 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (15,2R)- (CA INDEX NAME)

Absolute stereochemistry.

- RN 213999-54-3 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-2-(3-(sulfooxy)propyl)-1-(3,4,5-trimethoxyphenyl)-, inner salt, (1S,2R)- (CA INDEX NAME)

- OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
- RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 19 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1998:672521 CAPLUS Full-text
- DN 129:290071
- OREF 129:59118h,59119a
- TI Preparation of dimeric isoquinolines as ultra short acting neuromuscular blockers.
- IN Bigham, Eric Cleveland; Boswell, Grady Evan; Savarese, John Joseph; Swaringen, Roy Archibald, Jr.; Patel, Sanjay Shashikant; Boros, Eric Eugene; Mook, Robert Anthony, Jr.; Samano, Vincente
- PA Glaxo Group Limited, UK; Cornell Research Foundation Inc.

## 10/591,174

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

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	AT	4307			Т		20090515			AT	2003-	2056	0565 57		19980323 19980324			3	
	HR	9800			B1		2004	1031		HR	1998-15								
	TW	W 505635 X 9908725 O 9904680 O 314726 S 6187789				В		20021011			TW	1998-	98-87106631			1	9980	429	<
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	NO					A		1999	1124		NO					1	9990	924	<
	ИО					В1		2003	0512										
	US					В1		2001	0213		US	2000-381719 2000-102447			2	0000	000119		
	HK	HK 1023342		70		A1		2004	0730										
	JΡ	2008	12		A		20080131			JP 2007-247928				200709			10		

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PRAI GB 1997-6117
                                 19970325
                           Α
     GB 1997-24987
                           Α
                                 19971127
                                 19980323
     EP 1998-912494
                           A3
     EP 1998-922626
                           A3
                                 19980323
     JP 1998-543233
                           A3
                                 19980323
     WO 1998-EP1651
                                 19980323
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 129:290071

AB Title compds. (I; X = halo; n = 1, 2; Y = H, OMe; A = pharmaceutically acceptable anion), were prepared Thus, 2,2-difluoro-4-[3-[(15,2R)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-1,2,3,4-tetrahydro-2-isoquinolinio]propyl]-1-[3-[(1R,2S)-2-methyl-6,7,8-trimethoxyphenyl]methyl]-1,2,3,4-tetrahydro-2-isoquinolinio]propyl]butlanedioate dichloride showed ED95 = 0.035 mg/kg i.v.

for blockage of evoked twitch response of the tibialis anterior muscle.

III 213996-45-9P 213998-46-0P 213998-57-3P

11 2.13994-0-98 2.13996-0-08 2.13996-02-8 213995-82-95 213998-81-22 213998-82-49 213995-82-35 213995-84-65 213999-24-78 213997-38-38 213995-30-98 213999-46-38 213999-52-18

dichloride, (1R.2S) - (9CI) (CA INDEX NAME)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dimeric isoquinolines as ultra short acting neuromuscular blockers)

RN 213998-45-9 CAPLUS

CN Isoquinolinium, 2-[3-[[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,

MeO\_

●2 C1-

PAGE 1-B

OMe

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxy)propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxy)propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213998-57-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-58-4 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[{1R,2S}-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[{(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)- (9C1) (CA INDEX NAME)

●2 C1-

PAGE 1-B

RN 213998-81-3 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-3-chloro-1,4-dioxo-4-[3-(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213998-82-4 CAPLUS

CN Isoquinolinium, 2-[3-[1(2Z)-2-chloro-1,4-dioxo-4-[3-(1S,2R)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium
2-yl]propoxy]-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)(CA INDEX NAME)

●2 C1-

PAGE 1-B

RN 213998-83-5 CAPLUS

CN Isoquinolinium, 2-[3-[(2Z)-3-chloro-1,4-dioxo-4-[3-[(1R,2S)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

- RN 213998-84-6 CAPLUS
- CN Isoquinolinium, 2-[3-[1(2Z)-2-chloro-1,4-dioxo-4-[3-(1R,2S)-1,2,3,4tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium
  2-yl]propoxy]-2-buten-1-yl]oxy]propyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)(CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

2 C1-

PAGE 1-B

RN 213999-24-7 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2S)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

- RN 213999-38-3 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-2-bromo-1,4-dioxo-4-[3-[(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dibromide, (1R,2S)- (9C1) (CA INDEX NAME)

●2 Br-

PAGE 1-B

- RN 213999-39-4 CAPLUS
- CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-([3,4,5-trimethoxyphenyl)methyl]-, dichloride,([R,2S)-(9CI) (CA INDEX NAME)

MeO\_

●2 c1-

PAGE 1-B

оме

RN 213999-46-3 CAPLUS

CN Isoquinolinium, 2-[3-[2-fluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio[propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-

trimetnoxypnenyl)isoquinoiiniojpropoxyjbutoxyjpropylj-1,2,3,4-tetranydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

MeO\_

●2 c1-

PAGE 1-B

оме

RN 213999-47-4 CAPLUS

CN Isoquinolinium, 2-[3-[2-fluoro-1,4-dioxo-4-[3-[(18,28)-1,2,3,4-tetrahydro-6,7-dimethoxy2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio[propoxy]butoxy[propyl]-1,2,3,4-tetrahydro-1,3,4-tet

6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (1R,2S)- (9CI) (CA INDEX NAME)

MeO\_

●2 C1-

PAGE 1-B

RN 213999-50-9 CAPLUS

CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(18,2R)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxylbutoxylpropyl]-1,2,3,4-tetrrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

PAGE 1-B

RN 213999-51-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(2)-2-fluoro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,dichloride, (1R,2S)-(9CI) (CA INDEX NAME)

2 C1-

PAGE 1-B

RN 213999-52-1 CAPLUS

CN Isoquinolinium, 2-[3-[((22)-2-fluoro-1,4-dioxo-4-[3-(15,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinium-2-yllpropoxyl-2-buten-1-ylloxylpropyl]-1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-((3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)-(CA INDEX NAME)

●2 C1-

PAGE 1-B

IT 22325-16-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of dimeric isoquinolines as ultra short acting neuromuscular blockers)

- RN 22325-16-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, (IS)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 213999-42-9P 213999-53-2P 213999-54-3P

E14191-49-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dimeric isoquinolines as ultra short acting neuromuscular blockers)

RN 213999-42-9 CAPLUS

CN Isoquinolinium, 2-[3-[2,2-difluoro-1,4-dioxo-4-[3-[(15,25)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-

trimethoxyphenyl)isoquinolinio]propoxy]butoxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, dichloride, (IR,2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

MeO\_

$$\begin{array}{c} \text{Me O} \\ \text{Me O} \\ \text{Me} \end{array}$$

Cl-

PAGE 1-B

RN 213999-53-2 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (18,2R)- (CA INDEX NAME)

RN 213999-54-3 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-2-[3-(sulfooxy)propyl]-1-(3,4,5-trimethoxyphenyl)-, inner salt, (IS,2R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 214191-49-8 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1S,2S)- (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

## 10/591.174

## ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 20 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN 1.5
- AN 1997:661349 CAPLUS Full-text 127:341647 DN
- OREF 127:66922h,66923a
- Neuromuscular blocking activity of cyclic and acyclic bis-quaternary ammonium analogs of mivacurium chloride in the cat
- ΑU Patel, Sanjay S.; Maehr, R.; Savarese, John J.; Jackson, Mary M.; Wastila, William B.; Wisowatv, James C.
- Chem. Dev. Lab., Burroughs Wellcome Co., Research Triangle Park, NC, CS 27709, USA
- European Journal of Pharmaceutical Sciences (1997), 5(5), SO 253-266
- CODEN: EPSCED; ISSN: 0928-0987
- PB Elsevier DT Journal
- LA English AB
  - The purpose of this work was to identify a new ultra-short-acting neuromuscular blocking agent devoid of the potential to produce cardiovascular effects at ≥ED95 doses. Four new bis-quaternary mivacurium analogs that are acyclic with respect to the bis-isoquinolinium nuclei and seven new bisquaternary mivacurium analogs that are derivs. of (E)-oct-4-enedioic acid. (E)-oct-2-enedioic acid, and (E)-oct-4-enedithioic acid, were synthesized and tested for neuromuscular blocking activity in the cat. In general, compared with mivacurium, the acyclic analogs were of much lower potency but showed a faster onset (time from injection to maximum neuromuscular block) and a much shorter duration of action (time from injection to 95% recovery) at approx. ED95 doses. However, these acyclic analogs had a considerably narrower safety margin (i.e., the ratio of doses that produce unwanted cardiovascular or autonomic effects to those that produce neuromuscular block) than mivacurium. The (E)-oct-4-enedicate and (E)-oct-4-enedithicate analogs showed a neuromuscular blocking profile similar to the acyclic analogs. The (E)-oct-2enedioate isomer of mivacurium did not have any advantageous neuromuscular blocking properties over mivacurium and, in fact, elicited cardiovascular and autonomic effects at much lower multiples of ED95. Structural changes to mivacurium, however minor, to either the inter-onium chain or the onium centers (or both) result in compds. whose cardiovascular and autonomic safety profiles are highly compromised in return for the desirable rapid onset and brevity of neuromuscular blocking action at ≥ED95 doses. The intact isoquinolinium nucleus appears to confer a superior safety profile over that of an acyclic onium nucleus.
- 198400-95-3P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(neuromuscular blocking activity of cyclic and acyclic bis-guaternary ammonium analogs of mivacurium chloride)

- RN 198400-96-3 CAPLUS
- Isoquinolinium, 2,2'-[(1,8-dioxo-2-octene-1,8-div1)bis(oxv-3,1-CN propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, dichloride,  $[1\alpha, 2\beta]E(1'R^*, 2'S^*)]]-$  (9CI) (CA INDEX NAME)

●2 C1-

PAGE 1-B

IT 33033-86-2

RL: RCT (Reactant); RACT (Reactant or reagent) (neuromuscular blocking activity of cyclic and acyclic bis-quaternary ammonium analogs of mivacurium chloride)

RN 33033-86-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 198401-05-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(neuromuscular blocking activity of cyclic and acyclic bis-quaternary

ammonium analogs of mivacurium chloride)

- RN 198401-05-7 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-2-(3-hydroxypropyl)-6,7-dimethoxy-2methyl-1-(3,4,5-trimethoxyphenyl)-, chloride (1:1), (1R)- (CA INDEX NAME)

Absolute stereochemistry.

- c1-
- OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
  RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L5 ANSWER 21 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1997:183784 CAPLUS Full-text
- DN 126:233107
- OREF 126:44929a,44932a
- TI An application of TLC chromatographic data in QSAR assay of TIQs derivatives with B2-adrenergic activity. Part I.
- AU Brzezinska, Elzbieta
- CS Institute of Chemistry and Technology of Drugs, School of Medicine, Lodz, 90-151, Pol.
- SO Acta Poloniae Pharmaceutica (1996), 53(5), 383-388
- CODEN: APPHAX; ISSN: 0001-6837 PB Polish Pharmaceutical Society
- DT Journal
- LA English
- AB A QSAR anal. of  $\beta$ 2-adrenergic activity and chromatog. data of 4,6,8-

trihydroxy-, 6, $^{7}$ -dihydroxy- and 6, $^{7}$ -dimethoxy-1,2,3,4-tetrahydroisoquinoline derivs. were made. The TLC plates (silica gel 60 F254 silanized precoated), impregnated with solns. of selected amino acides mixts., were used as a  $\beta 2$ -agonistic and antagonistic interaction models. The hydrophobicity data of examined compds. ( $\alpha$  and  $\Sigma f$ -values) were obtained and used in the QSAR assay. Using a linear regression anal., interrelations between chromatog. and biol. activity data were found.

- IT 33033-84-0 188553-85-7
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
- (Biological study); USES (Uses)
  - (QSAR anal. of  $\beta$ 2-adrenergic activity and chromatog. data of trihydroxy-, dihydroxy- and dimethoxy-tetrahydroisoguinoline derivs.)
- RN 33033-84-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

RN 188553-85-7 CAPLUS

CN 6,7-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

- L5 ANSWER 22 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1997:183781 CAPLUS Full-text
- DN 126:287916

OREF 126:55561a,55564a

- TI Synthesis and pharmacological properties of
- 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivatives AU Brzezinska, Elzbieta
- CS Institute of Chemistry and Technology of Drugs, School of Medicine, Lodz, 90-151, Pol.
- SO Acta Poloniae Pharmaceutica (1996), 53(5), 365-371
  - CODEN: APPHAX; ISSN: 0001-6837
- PB Polish Pharmaceutical Society
- DT Journal
- LA English
- AB Some selected 1-ary1-6, 7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivs. were synthesized and evaluated as the  $\beta$ -adrenoceptor agents. Some of the compds. showed a weak agonistic or antagonistic activity on these receptors.
  - 33033-84-0P
  - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
    - (synthesis and pharmacol, properties of
  - 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivs.)
- RN 33033-84-0 CAPLUS

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) osc.g 3

L5 ANSWER 23 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1996:376527 CAPLUS Full-text

DN 125:167761

OREF 125:31433a

ΤI Asymmetric synthesis. XLI. Totally stereoselective synthesis of 1,3-disubstituted tetrahydroisoquinolines via the CN(R,S) method

ΑU Gosmann, Grace; Guillaume, Dominique; Husson, Henri-Philippe

CS Lab. Chimie Therapeutique associe CNRS, Univ. R. Descartes, Paris, 75270, Fr.

Tetrahedron Letters (1996), 37(25), 4369-4372 SO CODEN: TELEAY; ISSN: 0040-4039

Elsevier PR

Journal

LA English

OS. CASREACT 125:167761

GI

AB Optically active cis- or trans- 1,3-disubstituted tetrahydroisoguinolines 3-Ror 3S-I (R = Me, CH2Ph) can be prepared selectively from the same oxazolidine II. This latter is easily obtained from keto-acid III and (R)-(-)phenylqlycinol.

- IT 180072-45-1P 180072-48-4P 180072-49-5P 180072-50-8P
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
  - (stereoselective preparation of isoquinolines)
- RN 180072-45-1 CAPLUS
- CN 2(1H)-Isoquinolineethanol, 3,4-dihydro-6,7-dimethoxy-β-phenyl-1-(3,4,5-trimethoxyphenyl)-, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- RN 180072-48-4 CAPLUS
- CN 3-Isoquinolinecarbonitrile, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-[(1R)-1-phenyl-2-[(trimethylsily1)oxy]ethyl]-1-(3,4,5-trimethoxyphenyl)-, (1S)-(CA INDEX NAME)

- RN 180072-49-5 CAPLUS
- CN 3-Isoquinolinecarbonitrile, 1,2,3,4-tetrahydro-6,7-dimethoxy-3-methyl-2-[(1R)-1-phenyl-2-[(trimethylsilyl)oxy]ethyl]-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

- RN 180072-50-8 CAPLUS
- CN 3-Isoquinolinecarbonitrile, 1,2,3,4-tetrahydro-6,7-dimethoxy-3-

(phenylmethyl)-2-[(1R)-1-phenyl-2-[(trimethylsilyl)oxy]ethyl]-1-(3,4,5trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

IT 32886-69-4P 180072-46-2P 180072-47-3P 180187-56-8P 180187-57-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (stereoselective preparation of isoquinolines)

- RN 32886-69-4 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, (S)- (9CI) (CA INDEX NAME)

# Absolute stereochemistry.

- RN 180072-46-2 CAPLUS
- CN 2(1H)-Isoquinolineethanol, 3,4-dihydro-6,7-dimethoxy-3-methyl-β-phenyl-1-(3,4,5-trimethoxyphenyl)-, [15-[1α,2(S\*),3β]]- (9C1) (CA INDEX NAME)

### Absolute stereochemistry.

- RN 180072-47-3 CAPLUS
- CN 2(1H)-Isoquinolineethanol, 3,4-dihydro-6,7-dimethoxy- $\beta$ -pheny1-3-

(phenylmethyl)-1-(3,4,5-trimethoxyphenyl)-,  $[1S-[1\alpha,2(S^*),3\beta]]-(9CI)$  (CA INDEX NAME)

Absolute stereochemistry.

RN 180187-56-8 CAPLUS

CN 2(1H)-Isoquinolineethanol, 3,4-dihydro-6,7-dimethoxy-3-methyl-β-phenyl-1-(3,4,5-trimethoxyphenyl)-, [15-[1α,2(S\*),3α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 180187-57-9 CAPLUS

CN 2(1H)-Isoquinolineethanol, 3,4-dihydro-6,7-dimethoxy- $\beta$ -phenyl-3-(phenylmethyl)-1-(3,4,5-trimethoxyphenyl)-, [1S-[1 $\alpha$ ,2(S\*),3 $\alpha$ ]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)

### 10/591.174

- L5 ANSWER 24 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1996:365418 CAPLUS Full-text
- DN 125:75373
- OREF 125:14059a,14062a
- TI Synthesis and pharmacological investigations of 1,2,3,4-tetrahydroisoguinoline derivatives
- AU Brzezinska, E.; Venter, D.; Glinka, R.
- CS Institute Chemistry Technology Drugs, Medical University Lodz, Lodz, 90-151, Pol.
- SO Pharmazie (1996), 51(6), 397-399
- CODEN: PHARAT; ISSN: 0031-7144
- PB Govi-Verlag Pharmazeutischer Verlag
- DT Journal
- LA English
- AB Selected 1-ary1-6,7-dihydroxy-1,2,3,4-tetrahydroisoguinoline derivs. were synthesized and evaluated to determination the role of the hydrophobic Ph group at C-1 on the activity of these derivs. at  $\beta$ -adrenoreceptors. All the tests show that the investigated compds. are not very active. The Ph group is a poor substituent for  $\beta$ -adrenomimetic activity, but the presence of the Ph substituent at position 1 appears to enable these mol. to act as antagonists at  $\beta$ -adrenoreceptors.
- IT 57529-51-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrahydroisoquinoline derivs, and aryl group effect on  $\beta$ -adrenoreceptors)

- RN 57529-51-8 CAPLUS
- CN 6,7-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)



HC1

- OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
- L5 ANSWER 25 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1996:60166 CAPLUS Full-text
- DN 124:202678
- OREF 124:37481a,37484a
- TI Synthesis of 3,4-dihydroisoguinolines,
  - 2-alkyl-(2xyl)-1(2H)-3, 4-dihydroisoquinolinones, 2-alkyl-(2H)-risoquinolinones and 1-alkyl-(2H)-quinolinones by oxidation with potassium permanqanate
- AU Venkov, Atanas P.; Statkova-Abeghe, Stela M.
- CS Dep. Chem., Univ. Plovdiv, Plovdiv, 4000, Bulg.
- SO Tetrahedron (1996), 52(4), 1451-60 CODEN: TETRAB; ISSN: 0040-4020

### 10/591.174

- PB Elsevier
- DT Journal
- LA English
- OS CASREACT 124:202678
- AB Synthesis of 3,4-dihydroisoquinolines, 2-alkyl- and 2-acyl-3,4-dihydro-1(2H)-isoquinolinones, 2-alkyl-1(2H)-isoquinolinones, N-alkyl-3,4-dihydro-2(2H)-quinolinones and N-alkyl-2(2H)-quinolinones by oxidation of 1,2,3,4-tetrahydroisoquinolines, N-alkyl (acyl)iminium salts of 3,4-dihydroisoquinolines and isoquinoline as well as of N-alkyl ammonium salts of
- tetrahydroquinoline and quinoline with potassium permanganate is described. IT 174503-32-3
  - RL: RCT (Reactant); RACT (Reactant or reagent)
    - (synthesis of 3,4-dihydroisoguinolines,
      - 2-alkyl(acyl)-1(2H)-3,4-dihydroisoquinolinones,
      - 2-alkyl-1(2H)-isoquinolinones and 1-alkyl-2(2H)-quinolinones by oxidation with potassium permanganate)
- RN 174503-32-3 CAPLUS
- CN Isoquinoline, 1-(3,5-dimethoxyphenyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-(CA INDEX NAME)



OSC.G 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)

- L5 ANSWER 26 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1995:447155 CAPLUS Full-text
- DN 123:56331
- OREF 123:10159a,10162a
- TI Some observations on the enantio- and diastereo-selective synthesis of 1-substituted-1,2,3,4-tetrahydroisoquinolines
- AU Nagarajan, K.; Chandrasekharan, J.; Rodrigues, P. J.
- CS R and D Centre, Searle India Ltd., Thane, 400 601, India
- SO Journal of the Indian Institute of Science (1994), 74(2), 247-55
- CODEN: JIISAD; ISSN: 0019-4964
- DT Journal
- LA English

AB Several approaches to the synthesis of optically active 1-aryl-1,2,3,4tetrahydroisoquinoline alkaloids, cryptostylines from dihydroisoquinoline
precursors have been tried. Redns. of the 1-aryldihydroisoquinolines as well
as of their methiodidss with yeast are unsuccessful. Reduction of the
quaternary salts, e.g. I, with sodium tris-acyloxyborohydrides gives the
tetrahydroisoquinoline alkaloids in unsatisfactory enantiomeric excess. (±)Norcryptostyline is resolved with (-)- and (+)-teatratric acid into (-)S and
(+)R enantiomers, which are converted to their camphorsulfonyl derivs. II.
Reaction of camphorsulfonyl homoveratryl amine with piperonal affords a
mixture of 1R-II and 1S-II in the ratio of 4:3, whereas camphorsulfonylation
of (±)-norcryptostyline gives 1R-II much in excess of 1S-II (4:1).

IT 22325-16-2P, Cryptostyline III

RL: SPN (Synthetic preparation); PREP (Preparation) (enantio- and diastereoselective synthesis of substituted

tetrahydroisoquinolines)

RN 22325-16-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

- L5 ANSWER 27 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1992:426304 CAPLUS Full-text
- DN 117:26304

### 10/591.174

OREF 117:4739a,4742a

1, 4, 4a, 10b-Tetrahydro-N, N-dimethyl-4-phenanthridinamines and 1, 4, 4a, 5, 6, 10b-hexahydro-N, N-dimethyl-4-phenanthridinamines

ΑU Bobowski, George; West, Barbara; Omecinsky, Diana CS Parke-Davis Pharm. Res. Div., Warner-Lambert Co., Ann Arbor, MI, 48105,

USA

SO Journal of Heterocyclic Chemistry (1992), 29(1), 33-49 CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

English LA

CASREACT 117:26304 OS GI

AB Synthetic procedures to prepare the title compds. are described. Diels-Alder cycloaddn. of  $\beta$ -nitrostyrene derivs. to N,N-dimethyl-1,3-butadien-1-amine gave 5-aryl-N, N-dimethyl-6-nitro-2-cyclohexen-1-amines (I). Reduction of I with zinc in acetic acid gave the diamino derivs. II. Schotten-Baumann acylation of II gave amides III. Treatment of II with alkyl isocyanates gave the aminourea derivs. IV. Bischler-Napieralski cyclodehydration of III and IV gave 1,4,4a,10b-tetrahydrophenanthridinamines, e.g., V, and N6-alkyl-1,4,4a,10b-tetrahydro-N4,N4-dimethyl-4,6-phenanthridinediamines, resp. Condensation of diamines II with aryl aldehydes under azeotropic conditions gave imines, which on treatment with acids yielded 6-aryl-1,4,4a,5,6,10bhexahydro-N, N-dimethyl-4-phenanthridinamines, e.g., VI. The stereochem. of these materials is assigned by NMR.

ΤТ 141944-66-3P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

141944-66-3 CAPLUS RN

CN 4-Phenanthridinamine, 1,4,4a,5,6,10b-hexahydro-8,9-dimethoxy-N,N-dimethyl- $6-(3,4,5-trimethoxyphenyl)-, (4\alpha,4a\alpha,6\beta,10b\beta)- (9CI)$ (CA INDEX NAME)

### OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

- L5 ANSWER 28 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1992:214753 CAPLUS Full-text
- DN 116:214753 OREF 116:36409a,36412a
- TI Enantioselective synthesis of 1-substituted 1,2,3,4-tetrahydroisoquinoline alkaloids via asymmetric reduction
- AU Cho, Byung Tae: Han, Cheol Kyu
- CS Dep. Chem., Hallym Univ., Chunchon, 200-702, S. Korea
- SO Bulletin of the Korean Chemical Society (1991), 12(5), 565-9 CODEN: BKCSDE; ISSN: 0253-2964
- DT Journal
- LA English
- OS CASREACT 116:214753
- GI

- AB Enantioselective synthesis of 1-substituted tetrahydroisoquinoline alkaloids I (R = alkyl, aryl, aralkyl; Rl = H, Me) via asym. reduction of 1-substituted 3,4-dihydroisoquinolines and the corresponding iminium salts with the selected chiral hydride reagents, such as K glucoride Itsuno's reagent and Mosher's reagent were examined In these reactions, dihydroisoquinolines were not reduced by the hydride reagents, whereas the iminium salts were easily reduced under the same reaction conditions found in successful reduction of ketones. Thus, the reduction of 6,7-dimethoxy-3,4-dihydroisoquinolium iodide with the chiral reducing agents provided the product I (R = Rl = Me) with 52.3% ee, 18% ee, and 66.4% ee, resp.
- IT 22325-16-2P 33033-86-2P RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (enantioselective synthesis of, via asym. reduction)
- RN 22325-16-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 33033-86-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-

trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

# OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

- L5 ANSWER 29 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1992:151593 CAPLUS Full-text
- DN 116:151593
- OREF 116:25653a,25656a
- TI Preparation of tetrahydroisoquinolines as intermediates for alkaloids
- IN Takano, Seiichi; Suzuki, Masato; Ogasawara, Kuniro
- PA Kawaken Fine Chemicals Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 3 pp.
- CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03236375	A	19911022	JP 1990-30698	19900209 <
PRAI	JP 1990-30698		19900209		
os	CASREACT 116:151593	MARPA	T 116:151593		



- AB The title compds. I (R1 = aryl; R2 = H, alkyl, alkoxy; n = 1, 2), are prepared by treating aromatic imines II (R1, R2, n = same as I) with radical initiators and Bu3SnH in solvents. II [R1 = Ph, (R2)n = 4,5-dimethoxy], Bu3SnH, and AIBN in toluene were refluxed for 2 h to give 21.1% I [R1 = Ph, (R2)n = 6,7-dimethoxy].
- IT 33033-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by cyclization of benzylidene(bromophenyl)ethylamine)

- RN 33033-84-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

 $L_5$ ANSWER 30 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

1990:591122 CAPLUS Full-text AN

DN 113:191122

OREF 113:32349a,32352a

Substituted 1,4-dihydro-1-phenylisoquinolin-3(2H)-ones as inhibitors of cyclic nucleotide phosphodiesterases from dog heart

ΑU Georgiev, V. S.; Van Inwegen, R. G.; Carlson, P.

CS Rorer Cent. Res., Horsham, PA, 19044, USA

SO European Journal of Medicinal Chemistry (1990), 25(4), 375-8 CODEN: EJMCA5; ISSN: 0223-5234

Journal DT

LA. English

CASREACT 113:191122 OS.

GT

- AB Phenylisoquinolinone and -thione derivs. I [R = Ph, 3,4,5-(MeO)3C6H2; R1, R2 = H, MeO; X = O, S] were prepared and tested for their antiallergic activity. 1-Phenylisoquinoline derivs. also showed antiallergic activity.
- 130042-78-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antiallergic activity of)

RN 130042-78-3 CAPLUS

CN 3(2H)-Isoquinolinone, 1,4-dihvdro-6,7-dimethoxv-1-(3,4,5-trimethoxyphenv1)-(CA INDEX NAME)

- L5 ANSWER 31 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1990:497865 CAPLUS Full-text
- DN 113:97865 OREF 113:16545a,16548a
- TI Enantioselective synthesis of cryptostyline I, II and III via asymmetric reduction
- AU Cho, Byung Tae; Han, Cheol Kyu
- CS Dep. Chem., Hallym Univ., Chuncheon, 200-702, S. Korea
- SO Bulletin of the Korean Chemical Society (1990), 11(1), 81-2
- CODEN: BKCSDE; ISSN: 0253-2964
- DT Journal
- LA English
- GI

Meo Meo Meo 
$$I^ I^ I^-$$

- AB The title compds. [(S)-I, R = H, R1R2 = OCH2O, R1 = R2 = MeO; R = R1 = R2 = MeO] were prepared by asym. reduction of the isoquinolinium salts II with K glucoride, Itsumo's reagent, and Maskerh's reagent.
- RN 22325-16-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

- RN 33033-86-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L5 ANSWER 32 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1990:497864 CAPLUS Full-text

DN 113:97864

OREF 113:16545a,16548a

TI Synthesis of racemic cryptostylines I, II, and III by radical cyclization

AU Takano, Seiichi; Suzuki, Mahito; Kijima, Atsushi; Ogasawara, Kunio

CS Pharm. Inst., Tohoku Univ., Sendai, 980, Japan

SO Chemistry Letters (1990), (2), 315-16

CODEN: CMLTAG; ISSN: 0366-7022 DT Journal

LA English

OS CASREACT 113:97864

05

- AB Three 1-phenyl-1,2,3,4-tetrahydroisoquinoline alkaloids, cryptostylines I (I, R1R2 = OCH2O, R3 = H), II (I, R1 = R2 = MeO, R3 = H), and III (I, R1 = R2 = R3 = MeO) were synthesized in racemic forms via a aryl radical-initiated cyclization of imines II.
  - IT 33033-84-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and methylation of)

RN 33033-84-0 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

- RN 22324-83-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

OSC.G 28 THERE ARE 28 CAPLUS RECORDS THAT CITE THIS RECORD (28 CITINGS)

- L5 ANSWER 33 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1990:458769 CAPLUS Full-text
- DN 113:58769
- OREF 113:9931a,9934a
- TI The synthesis of 4-desoxy-2-azapodophyllotoxins
- AU Van der Eycken, J.; Bosmans, J. P.; Van Haver, D.; Vandewalle, M.; Hulkenberg, A.; Veerman, W.; Nieuwenhuizen, R.
- CS Dep. Org. Chem., State Univ. Gent, Ghent, B-9000, Belg.
- SO Tetrahedron Letters (1989), 30(29), 3873-6 CODEN: TELEAY; ISSN: 0040-4039
- DT Journal
- LA English
- OS CASREACT 113:58769

GT

- AB 4-Desoxy-2-azapodophyllotoxins I (n = 1, 2), tetrahydroisoquinoline analogs of podophyllotoxin, have been synthesized and evaluated for their antitumor activities.
- IT 123049-96-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with dibromoethane)

RN 128049-96-7 CAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, methyl ester, (1S-cis)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

# OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

L5 ANSWER 34 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1990:118803 CAPLUS Full-text

DN 112:118803

OREF 112:20131a,20134a

TI Preparation of oxazoloisoquinolines as anticancer agents

IN Tawara, Tetsuji; Ichanagi, Yukio; Yamagami, Keiji; Fujii, Akihiro

PA Yoshitomi Pharmaceutical Industries, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

FAN.	CNII					
	PATENT NO.	KIND DATE		APPLICATION NO.	DATE	
ΡI	JP 01199976	A	19890811	JP 1987-284890	19871110 <	
PRAI	JP 1987-255755	A1	19871008			
OS	MARPAT 112:118803					

- AB The title compds. I (R1, R2 = OH, alkoxy, R1R2 may be alkylenedioxy; X, Y, Z = OH, alkoxy), which have low toxicity, are prepared Treatment of 15.0 g Me cis-2-benzyloxycarbonyl-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-1,2,3,4-tetrahydroisoquinoline-3-carboxylate (preparation given) with CH2Br2, K2CO3, and CuO in DMF at 100-110° for 4 h gave 12.0 g Me cis-2-benzyloxycarbonyl-1-(3,4,5-trimethoxyphenyl)-6,7-methylenedloxy-1,2,3,4-tetrahydroisoquinoline-3-carboxylate, which (3,4 g) was treated with L1BH4 in THF at 50-55° for 9 h to afford 1.8 g cis-1 (R1R2 = OCH2O; X = 3-OMe, Y = 4-OMe, Z = 5-OMe) (III). Administration of II at 100 mg/kg/day i.p. for 5 days to P388 leukemia cellbearing mice showed 210% T/C (treated group/control group) survival time, vs. 157%, for podophylotoxin at 25 mg/kg/day. Il at 300 mg/kg (ip.o.) exhibited no toxicity (no information on test animal), whereas podophylotoxin at 25 mg/kg was toxic.
- IT 125445-07-0P 125445-08-1P 125445-09-2P 125445-10-5P 125445-13-6P 125445-14-9P 125445-13-6P 125445-14-9P 125445-15-0P 125456-07-7P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, in preparation of oxazoloisoguinolines)
- RN 125445-07-0 CAPLUS
  CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5-trimethoxyohenvl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

- RN 125445-08-1 CAPLUS
- CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, 2-(phenylmethyl) ester, cis- (9C1) (CA INDEX NAME)

RN 125445-09-2 CAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, methyl ester, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 125445-10-5 CAPLUS

2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, 3-methyl 2-(phenylmethyl) ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 125445-13-8 CAPLUS

CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, 3-methyl 2-(phenylmethyl) ester, cis- (9CI) (CA INDEX NAME)

RN 125445-14-9 CAPLUS

CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, 2-(phenylmethyl) ester, trans-(9C1) (CA INDEX NAME)

Relative stereochemistry.

RN 125445-15-0 CAPLUS

CN

2,3(1H)-Isoquinolinedicarboxylic acid,
3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, 3-methyl
2-(phenylmethyl) ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 125456-07-7 CAPLUS

CN 2(1H)-Tsoquinolinecarboxylic acid, 3,4-dihydro-6,7-dihydroxy-3-(hydroxymethyl)-1-(3,4,5-trimethoxyphenyl)-, phenylmethyl ester, cis- (9C1) (CA INDEX NAME)

125456-08-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

125456-08-8 CAPLUS RN

CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, 2-(phenylmethyl) ester, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

#### OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- ANSWER 35 OF 61 CAPLUS COPYRIGHT 2009 ACS on SIN L5
- 1989:497608 CAPLUS Full-text AN
- DN 111:97608

OREF 111:16437a,16440a

- ΤI Carbon-transfer reactions with heterocycles. Part 3. Synthetic equivalence of oxazolidines with carbonvl compounds
- ΑU Singh, Harjit; Sarin, Rakesh
- CS Dep. Chem., Guru Nanak Dev Univ., Amritsar, 143005, India
- SO Journal of Chemical Research, Synopses (1988), (10), 322-3 CODEN: JRPSDC: ISSN: 0308-2342
- DT Journal LA English
- CASREACT 111:97608 os
- GI

- AB Oxazolidines transfer C-2 carbon units to binucleophiles to furnish heterocycles including \( \beta\)-carboline and isoquinoline alkaloids. Thus, the oxazolidine I was treated with tryptamine in MeCN containing acid to give its carboline II.
- IT 33033-94-0P
   RL: SPN (Synthetic preparation); PREP (Preparation)
- (preparation of) RN 33033-84-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

# OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

- L5 ANSWER 36 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1989:154166 CAPLUS Full-text
- DN 110:154166
- OREF 110:25491a,25494a
- TI Preparation of di- and tetrahydroisoquinoline derivatives as cytostatics
- PA Duphar International Research B. V., Neth.
- SO Jpn. Kokai Tokkyo Koho, 13 pp.
- CODEN: JKXXAF DT Patent
- LA Japanese
- FAN. CNT 1

T TALL .													
	PATENT NO.					KIN	D DATE	A.	PPLICAT	ION NO.		DATE	
PI	JΡ	6228	3960			A	1987	1209 J.	9 1987-	119169		19870518	<
	CA	1330	560			C	1994	0705 C.	A 1987-	537195		19870515	<
	DK	8702	503			A	1987	1122 D	K 1987-	2503		19870518	<
	AU	8773	149			A	1987	1126 A	J 1987-	73149		19870518	<
	ZA	8703	561			A	1987	1230 Z.	A 1987-	3561		19870518	<
	IL	8255	5			A	1991	0512 I	1987-	82555		19870518	<
	EP	2513	61			A1	1988	0107 E	9 1987-	200926		19870519	<
		R:	AT,	BE,	CH,	DE,	ES, FR,	GB, GR,	IT, LI,	LU, NL,	SE		
	US	5162	335			A	1992	1110 U	3 1989-	480755		19891127	<
PRAI	NI.	1986	-127	9		A	1986	0521					
		1987				B2	1987						
		1987				B1	1987						

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Title compds. I [R, R1, R2 = H, halo, CF3, C1-4 alkyl, C1-4 alkoxy; RR1, R1R2, R2R13 = hydrocarbenyl (may be interrupted with 1-3 N, O, or S) to form 5-7 membered cycle which may be substituted with C1-4 alkyl, halo, oxo, or thioxo; R3 = H, OH, C1-4 alkoxy, alkanovloxy; R4 = H, CO2R11, CON(R12)2, CH2OR15 (R11, R12 = C1-4 alkvl: R15 = H. C1-4 alkvl. tetrahydropyranyl, C1-4 alkanovl. monoor di-C1-4 alkvl substituted carbamovl); R5 = H, C1-4 alkanovl, alkvl; R4R5 = CH2XZ (X = O, NH, alkyl-substituted N; Z = CO, CS, SO, CH2); R6 = H; R5R6 = bond; R7, R9 = H, C1-4 alkoxy; R8 = H, C1-4 alkoxy, alkanovloxy, OH, halo; R7R8, R8R9 = OCH2O, O(CH2)2O; R10 = H, C1-4 alkyl, alkoxy; R14 = H, Me] are prepared from N-phenethylbenzamides II. A solution of II (R = R3 = R10 = R13 = R14 = H; R1R2 = OCH2O; R7 = R8 = R9 = MeO) was successively treated with PC15 and AlC13 to give 92% I (R = R3 = R10 = R13 = R14 = H; R1R2 = OCH20; R4 = AcOCH2; R5R6 = bond; R7 = R8 = R9 = MeO), which was hydrolyzed with K2CO3 in MeOH to afford 83% I (R4 = CH2OH). The latter product in THF was treated with AlH3 (generated from AlCl3 and LiAlH4 in situ) for 1.5 h to give 97% I (R5 = R6 = H), which in CH2Cl2 was treated with Cl2CO in the presence of NEt3 to afford 89% I [R = R3 = R6 = R10 = R13 = R14 = H; R1R2 = OCH20; R4R5 = CH2OC(O); R7 = R8 = R9 = MeO; cis-form at 1,3-position] (III). III at 15 μg/mL showed .apprx.50-100% control of human cell lines.

III 118068-19-2P 118068-20-5F RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of isoquinoline cytostatics) RN 118068-19-2 CAPLUS

CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, methyl ester (CA INDEX NAME)

- RN 118068-20-5 CAPLUS
- CN 2,3(1H)-Isoquinolinedicarboxylic acid, 3,4-dihydro-6,7-dihydroxy-1-(3,4,5-trimethoxyphenyl)-, 3-methyl

2-(phenylmethyl) ester (CA INDEX NAME)

OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

- L5 ANSWER 37 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1984:610940 CAPLUS Full-text
- DN 101:210940
- OREF 101:31959a
- TI Synthesis and radioprotectant properties of some derivatives of 6-hydroxy-1,2,3,4-tetrahydroisoquinoline
- AU Alpatova, T. V.; Klimova, A. D.; Kulinskii, V. I.; Mirzoyan, V. S.; Mirzoyan, A. T.; Yashunskii, V. G.
- CS Inst. Biofiz., Moscow, USSR
- SO Khimiko-Farmatsevticheskii Zhurnal (1984), 18(4), 444-9
- CODEN: KHFZAN: ISSN: 0023-1134
- DT Journal LA Russian
- OS CASREACT 101:210940
- GI

- AB Cyclocondensation of 3-HOC6H4CH(OH)CH2NHCH2Ph with R2CHO (R2 = Me, 2-, 4-HOC6H4, 4-pyridyl) gave 36.5-88% isoquinolinols I (R = PhCH2, R1 = H, R2 as above) which were debenzylated by Pd-C to give 47-768 I (R = R1 = H, R2 = Me, 2-, 4-HOC6H4). Cyclocondensation of 3-HOC6H4CH(OH)CH2NHMe with R2CHO gave 30-50% I (R = Me, R1 = H, R2 = H, 2-HOC6H4, 4-MeOC6H4). Addnl. obtained were 3-HOC6H4CH(OH)CH2NRCHRIRZ (R = R1 = H, R2 = Me, 4-MeOC6H4) R = Me, R1 = R2 = Hf, R = H, R1 = R2 = Me). Mice treated with I (R = PhCH2, R1 = H, R2 = Me) (LD50 3521  $\pm$  56  $\mu$ mol/kg) increased their survival time to 13  $\pm$  6% at 50  $\mu$ mol/kg dosage compared to 5.6  $\pm$  1.3 for a control.
- IT 93202-94-9 93202-96-1
  RL: RCT (Reactant); RACT (Reactant or reagent)
  (radioprotectant properties of)
- RN 93202-94-9 CAPLUS
- CN 4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

RN 93202-96-1 CAPLUS

CN 4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-2-(phenylmethyl)-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

### OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L5 ANSWER 38 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1984:530578 CAPLUS Full-text
- DN 101:130578
- OREF 101:19861a,19864a
- TI Synthesis of benzazepinespirocycloalkanes. IV.
- 1,2-Substituted-1,2,3,4-tetrahydrospiro-5-cyclopentane-(5H)-2-benzazepines
- AU Solomina, L. P.; Pirdzhanov, L. Sh.; Markaryan, E. A.
- CS Inst. Tonkoi Org. Khim. im. Mndzhoyana, Yerevan, USSR
- SO Armyanskii Khimicheskii Zhurnal (1984), 37(4), 253-7
- CODEN: AYKZAN; ISSN: 0515-9628
- DT Journal
- LA Russian
- OS CASREACT 101:130578
- 0.01.01.01.101.1000

### \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

- AB Condensation of cyclopentaneethanamine I and spiro(benzazepine-cyclopentane) II with 3,4,5-(MeO)2RC6H2(CH2)nCOC1 (R = MeO, n = 0; R = H, n = 1) yields amides III and IV. Cyclodehydration and reduction of III with POC13 and NaBH4 gives V [R1 = 3,4-(MeO)2C6H3CH2, 3,4,5-(MeO)3C6H2, R2 = H] which were N-methylated by CH20-HCO2H to give V (R2 = Me). Reduction of IV by LiAlH4 gave 50.0 and 42.3% V [R1 = Me, R2 = 3,4-(MeO)2C6H3CH2CH2, 3,4,5-(MeO)3C6H2CH2].
  - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and N-methylation of)

RN 91935-74-9 CAPLUS

CN Spiro[5H-2-benzazepine-5,1'-cyclopentane], 1,2,3,4-tetrahydro-7,8-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

IT 91935-76-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 91935-76-1 CAPLUS

CN Spiro[5H-2-benzazepine-5,1'-cyclopentane],

1,2,3,4-tetrahydro-7,8-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 39 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1982:509845 CAPLUS Full-text

DN 97:109845

OREF 97:18269a,18272a

TI A new variant of the internal  $\alpha$ -amidoalkylation reaction: synthesis of 1-aryl-3-oxo-2,3-dihydroisoquinolines and cryptostyline III

AU Venkov, A.; Lukanov, L.; Mollov, N.

CS Dep. Chem., Univ. Plovdiv, Plovdiv, 4000, Bulg.

SO Synthesis (1982), (6), 486-7 CODEN: SYNTBF; ISSN: 0039-7881 DT Journal LA English

AB Isoquinolinones I [R = H, OMe; R1 = Me, Ph, 4-MeOC6H4; R2 = H, 4-O2N, 4-C1, 4-F, 3,4,5-(MeO)3] were obtained at 32-67% yield by treating 3,4,5-R(MeO)2C6H2CH2CO2H with R2C6H4COMHR1 in the presence of POC13. Cryptostyline III was prepared by 2-stage reduction of I [R = H, R1 = Me, R2 = 3,4,5-(MeO)3].

IT 82801-28-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reduction of)

RN 82801-28-3 CAPLUS

CN 3(2H)-Isoquinolinone, 1,4-dihydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

IT 22324-83-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 22324-83-0 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

### 10/591.174

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

ANSWER 40 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

1981:603702 CAPLUS Full-text AN

DN 95:203702

OREF 95:34033a

Use of a benzyl protective group in the synthesis of tetrahydroisoguinoline derivatives

ΑU Alpatova, T. V.; Yashunskii, V. G.

CS Inst. Biofiz., Moscow, 123182, USSR

SO Khimiva Geterotsiklicheskikh Soedinenii (1981), (8), 1084-7

CODEN: KGSSAQ; ISSN: 0453-8234

DT Journal

LA Russian

OS CASREACT 95:203702

GT

Cyclocondensation of 3-HOC6H4CH(OH)CH2NHCH2Ph (I) with 3,4,5-RR1R2C6H2CHO AR (R,R1,R2 = MeO,HO,H; MeO,MeO,MeO; H,Me2N,H) gave benzylisoquinolines II (R3 = benzyl), which were debenzylated by hydrogenolysis over Pd black to give II (R3 = H). I and CH2O gave a mixture of 2-benzyl-1,2,3,4tetrahydroisoquinoline-4,6-diol and 2-benzyl-1,2,3,4-tetrahydroisoquinoline-4,8-diol; these compds. were also debenzylated. Debenzylationcyclocondensation of III gave lactam IV.

79677-06-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and debenzylation of)

79677-06-8 CAPLUS RN

4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-2-(phenylmethyl)-1-(3,4,5trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

IT 72512-01-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 72512-01-7 CAPLUS

CN 4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

HC1

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

.5 ANSWER 41 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1981:198 CAPLUS Full-text

DN 94:198

OREF 94:39a,42a

- TI Pharmacological studies on some derivatives of the isoquinoline series
- AU Nikolova, M.; Ivanova, N.
- CS Bulg.
- SO Trudove na Nauchnoizsledovatelskiya Khimikofarmatsevtichen Institut (1978), 10, 211-19 CODEN: TKZGAG; ISSN: 0371-8972

DT Journal

- LA Bulgarian
- GI

- AB Among 12 title compds. I (R1 and R2 and R3 = H, Cl, or MeO; R4 = NO2, NH2, or NHCOCBr(Me)2) II (R1 and R2 and R3 = MeO; R4 = NO2; R5 = CH2CO2Et), and III (R1 and R2 and R3 = H, Cl; R4 = H, Et, CHMe2; R5 = H, NH2, NO2), evaluated pharmacol. in vivo, III showed weak central depressive activity and lower toxicity than I. All compds. had low hypotensive activity and little effect on the smooth muscle of gastrointestinal tract and bronchi.
- IT 75230-95-4 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (pharmacol. of) RN 75230-95-4 CAPLUS
- CN 2(1H)-Isoquinolineacetic acid, 3,4-dihydro-6,7-dimethoxy-1-(3,4,5-trimethoxy-2-nitrophenyl)-, ethyl ester (CA INDEX NAME)

- L5 ANSWER 42 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1980:531967 CAPLUS Full-text
- DN 93:131967
- OREF 93:21029a,21032a
- TI Carbon-13 NMR spectra of 4-hydroxytetrahydroisoquinolinium chlorides
- AU Baddeley, G. Vernon; Quessy, Stephen N.; Williams, Lyall R.
- CS Sch. Chem., Univ. New South Wales, Kensington, 2033, Australia
- SO Australian Journal of Chemistry (1980), 33(2), 447-50 CODEN: AJCHAS; ISSN: 0004-9425
- DT Journal
- LA English

- AB The natural abundance 13C NMR spectra of tetrahydroisoquinolinium salts are reported and discussed in terms of the substitution profile and stereochem. of the salts.
- IT 72511-98-9 72512-01-7 RL: PRP (Properties) (carbon-13 NMR of)
- RN 72511-98-9 CAPLUS
- CN 4,6,8-Isoquinolinetrio1, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)



- HC1
- RN 72512-01-7 CAPLUS
- CN 4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)



- HC1
- L5 ANSWER 43 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1980:58575 CAPLUS Full-text
- DN 92:58575
- OREF 92:9699a,9702a
- TI Synthesis and biological evaluation of tetrahydroisoquinolin-4-ol derivatives
- AU Quessy, Stephen N.; Williams, Lyall R.
- CS Sch. Chem., Macquarie Univ., North Ryde, 2113, Australia
- SO Australian Journal of Chemistry (1979), 32(6), 1317-27 CODEN: AJCHAS; ISSN: 0004-9425
- DT Journal
- LA English
- OS CASREACT 92:58575

GΙ

- AB Hydroxytetrahydroisoquinolines I (R = Rl = H, Me), II, III (R2, R3 = H, MeO), and IV, cyclic analogs of phenylethanolamines, were prepared I-IV had no  $\beta$ -adrenocepter stimulating activity.
- IT 72511-98-9P 72512-01-7P
  RL: SPN (Synthetic preparation); PREP (Preparation)
  (preparation of)
- RN 72511-98-9 CAPLUS
- CN 4,6,8-Isoquinolinetriol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

HC1

- RN 72512-01-7 CAPLUS
- CN 4,6-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

L5 ANSWER 44 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1978:121486 CAPLUS Full-text

DN 88:121486

OREF 88:19081a,19084a

TI Polymethoxylated isoquinolines as potential antimitotic agents

AU Iorio, Maria; Brossi, Arnold; Chignell, Colin F.

CS Lab. Chem., Natl. Inst. Arthritis, Metab. Dig. Dis., Bethesda, MD, USA

SO Heterocycles (1978), 9(1), 1-6 CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

C.T.

AB The sendaverine derivs. I (R = MeO, Rl = H; R = H, Rl = MeO) were prepared by condensation of mescaline with 2,4,5-(MeO)305E2CHO and 3,4,5-(MeO)305E2CHO and reduction of the Schiff bases to give II, which were cyclized. The cryptostyline derivative III was prepared by cyclization of 3,4,5-(MeO)305E2CNNCH2CH2C6H2(OMeO)3-3,4,5 followed by reduction and dehydrogenation. Using colchicine as a standard none of the compds. showed any binding affinity to the rat brain microtubule protein.

IT 65967-39-7P RL: RCT (Reactant): SPN (Synthet:

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and dehydration of)

RN 65967-39-7 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, ethanedioate (1:?) (CA INDEX NAME)

CM

CRN 65967-38-6

CMF C22 H29 N O6

CM 2

CRN 144-62-7

CMF C2 H2 O4

IT 65967-37-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and methylation of)

RN 65967-37-5 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7,8-trimethoxy-1-(3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

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L5 ANSWER 45 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
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AN 1977:121306 CAPLUS Full-text

DN 86:121306

OREF 86:19159a,19162a

TI 1,4-Benzodiazepines. IV. 6-Phenyl- and 6-thienyltetrahydroisoquinolino[2,1-d]-7H-[1,4]-benzodiazepines

### 10/591.174

- ΑU Ivanov, Ch.; Shvedov, V. I.
- CS Sci.-Res. Chem.-Pharm. Inst., Sofia, Bulg.
- Khimiko-Farmatsevticheskii Zhurnal (1976), 10(7), 44-51 SO CODEN: KHFZAN; ISSN: 0023-1134
- Journal
- LA Russian

$$\begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{Rl} \\ \text{R}^2 \\ \text{R}^3 \end{array} \quad \text{II} \quad \begin{array}{c} \text{MeO} \\ \text{MeO} \\ \text{MeO} \\ \text{Rl} \\ \text{R}^3 \\ \text{R}^3 \end{array} \quad \text{II}$$

- AΒ Isoquinolinobenzodiazepines I (R1 = C1, H, MeO, R2 = H, C1, MeO, R3 = H, MeO, R4 = Ph, 4-biphenylyl, 4-BrC6H4, 4-MeOC6H4, 4-O2NC6H4, 2-thienyl) were obtained in 15-33% yields by reduction of II with NaBH4 followed by cyclization with R4COCH2Br. Addnl. I (R1 = C1, R2 = R3 = H, R4 = Ph, 4biphenylyl, 4-BrC6H4, 4-MeOC6H4, 4-O2NC6H4) were obtained from II by cyclization with R4COCH2Br followed by reduction with NaBH4.
- 62206-18-2P
- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and cyclization by phenacyl bromides)
- RN 62206-18-2 CAPLUS
- Benzenamine, 2,3,4-trimethoxy-6-(1,2,3,4-tetrahydro-6,7-dimethoxy-1-CN isoquinolinvl) - (CA INDEX NAME)

- L5 ANSWER 46 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1976:164575 CAPLUS Full-text
- DN 84:164575
- OREF 84:26711a,26714a
- Isoquinoline derivatives. XI. Synthesis and pharmacological activity of 1-arylalkyl-4-spirocyclohexane-6,7-dimethoxy-1,2,3,4tetrahydroisoguinolines and some of their derivatives
- ΑU Markaryan, E. A.; Arustamyan, Zh. S.; Vasilyan, S. S.; Markaryan, K. Zh.
- CS Inst. Tonkoi Org. Khim. im. Mndzhovana, Yerevan, USSR
- SO Armyanskii Khimicheskii Zhurnal (1975), 28(10), 829-35 CODEN: AYKZAN; ISSN: 0515-9628

- DT Journal
- LA Russian
- OS CASREACT 84:164575
- GI

- AB Spiro[cyclohexaneisoquinoline] derivs. I [R = Ph, 3,4-(MeO)2C6H3, 3,4,5-(MeO)3C6H2, Ph2CH, n = 0,1] were obtained in 45.3-69.4% yields by cyclization of amides II with PCCl3. Reduction of I by NaBH4 gave 67.3-81.2% 1,2-dihydro derivs. Cyclocondensation of the appropriate 1,2-dihydro derivative with HCHO gave 55.1 and 56% berbines III (n = 1,2). I were useful in treatment of hypertension, as muscle relaxants, and as antiarrhythmics.
- IT 59021-77-1P
  - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
- RN 59021-77-1 CAPLUS
- CN Spiro[cyclohexane-1, 4'(1'H)-isoquinoline],
  - 2',3'-dihydro-6',7'-dimethoxy-1'-(3,4,5-trimethoxyphenyl)-, hydrochloride
  - (1:1) (CA INDEX NAME)

● HC1

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L5 ANSWER 47 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

### 10/591.174

AN 1976:4818 CAPLUS Full-text

DN 84:4818

OREF 84:813a,816a

TI 6,7-Dihydroxy-1-(3,4,5-trimethoxybenzyl)-1,2,3,4-tetrahydroisoquinoline

IN Vasvari, Mrs. Arpad; Meszaros, Zoltan; Nagy, Gabor; Hermecz, Istvan; Horvath, Agnes; David, Agoston; Mandi, Attila; Pajor, Aniko

PA Chinoin Gyogyszer es Vegyeszeti Termekek Gyara Rt., Hung.

SO Hung. Teljes, 13 pp.

CODEN: HUXXBU

DT Patent

LA Hungarian

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	HU 9519		19750328	HU 1973-CI1389	19730628 <

AB 3,4-(HO)2C6H3CH2CH2NH2.HBr added to excess Na 3,4,5-trimethoxyphenylglycidate in aqueous HCL-AcOH, the mixture stirred 2 hr at 20° and 5 hr at 70-80° and pH 1 gave 54% title product HCl salt, m. 225-6° (MeOH).

IT 57529-51-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

RN 57529-51-8 CAPLUS

CN 6,7-Isoquinolinediol, 1,2,3,4-tetrahydro-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

HC1

L5 ANSWER 48 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1975:593279 CAPLUS <u>Full-text</u>

DN 83:193279

OREF 83:30405a,30408a

TI Heterocyclic compounds IN Ott, Hans; Suess, Rudolf

PA Sandoz-Patent-G.m.b.H., Fed. Rep. Ger.

SO Ger. Offen., 29 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	DE 2503156	A1	19750807	DE 1975-2503156	19750127 <
	FI 7500205	A	19750806	FI 1975-205	19750127 <
	SE 7500859	A	19750806	SE 1975-859	19750127 <
	DK 7500242	A	19750929	DK 1975-242	19750127 <
	DK 136189	В	19770829		

10200120

	DK 136189	C	19780130		
	NO 7500263	A	19750806	NO 1975-263	19750129 <
	NL 7501159	A	19750807	NL 1975-1159	19750131 <
	BE 825124	A1	19750804	BE 1975-153007	19750203 <
	DD 117216	A5	19760105	DD 1975-183969	19750203 <
	AU 7577843	A	19760805	AU 1975-77843	19750203 <
	HU 169923	В	19770228	HU 1975-SA2741	19750203 <
	GB 1497722	A	19780112	GB 1975-4516	19750203 <
	GB 1497723	A	19780112	GB 1977-30857	19750203 <
	JP 50108297	A	19750826	JP 1975-14021	19750204 <
	AT 7500799	A	19790115	AT 1975-799	19750204 <
	AT 351536	В	19790725		
	CA 1055944	A1	19790605	CA 1975-219303	19750204 <
	FR 2259611	A1	19750829	FR 1975-3547	19750205 <
	FR 2259611	B1	19800111		
	ZA 7500743	A	19760929	ZA 1975-743	19750205 <
	US 4087530	A	19780502	US 1976-670111	19760325 <
PR.	AI CH 1974-1550	A	19740205		
	US 1975-545540	A2	19750130		
	GB 1975-4516	A	19750203		
	GB 1975-18178	A	19750917		
	GB 1975-38177	A	19750917		
O.C.	MADDAT 02.102270				

OS MARPAT 83:193279

GI For diagram(s), see printed CA Issue.

AB Broncholytic (no data) cis-octahydrobenzonaphthyridines I (R = H, 8-OH, 8-OMe, 9-OMe, 9-OH; R1 = H, 3-OMe, 3-Cl, 3-OH, 2-OH; R2 = H, NH2, NHAc, F, Me, C1, OMe, OH, NO2, NMe2; R2 = H, OMe, OH) (39 compds.) were prepared by reducing the 1,2,3,4,4a,10b-hexahydro analogs with PtO, or NaBH4.

IT 57251-31-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 57251-31-7 CAPLUS

CN Benzo[c][1,6]naphthyridine, 1,2,3,4,4a,5,6,10b-octahydro-9-methoxy-2-methyl-6-(3,4,5-trimethoxyphenyl)-, dihydrochloride, (4aa,68,10ba)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

■2 HC1

# OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

- L5 ANSWER 49 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1975:80346 CAPLUS Full-text
- DN 82:80346

OREF 82:12793a,12796a

- TI Experimental studies on the antitumor effect of ethidium bromide and related substances
- AU Nishiwaki, Hiroshi, Miura, Moriji; Imai, Kuniyuki; Ohno, Ryuzo; Kawashima, Kohei; Ezaki, Koji; Ueda, Ryuzo; Yoshikawa, Haruya; Nagata, Kouichiro; et al.
- CS Sch. Med., Nagoya Univ., Nagoya, Japan
- SO Cancer Research (1974), 34(10), 2699-703 CODEN: CNREA8: ISSN: 0008-5472
- DT Journal
- LA English
- GI For diagram(s), see printed CA Issue.
- AB Ethidium bromide [1239-45-8] increased by ≤200% the life span of mice with tumor 6C3HED-OG, and by ≤83% the life span of mice with L5178Y. No such effect was noted in mice with turmors L1210, EL4, 6C3HED-RG, RADA1, or Walker carcinosarcoma 256. Of the 14 related compds. tested, PD-MY-001 [I] [53409-06-6] and PD-MY-003 [II] [38483-26-0] also increased the survival time of mice with 6C3HED-OG by ≤200%. Ethidium bromide and these 2 newly synthesized compds. are apparently antitumor agents with a unique mechanism of action. 53954-69-1
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (neoplasm inhibition by)
- RN 53954-69-1 CAPLUS
- CN Isoquinoline, 1-(2-chloro-3,4,5-trimethoxyphenyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-, hydrochloride (1:1) (CA INDEX NAME)



HC1

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

- L5 ANSWER 50 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1974:435571 CAPLUS Full-text
- DN 81:35571
- OREF 81:5709a,5712a
- TI Orchidaceae alkaloids. XXXIX. Isolation of (-)-cryptostyline I, II, III and two quaternary salts from Cryptostylis erythroglossa. Biosynthetic studies of (-)-cryptostyline I
- AU Agurell, Stig; Granelli, Ingrid; Leander, Kurt; Luning, Bjorn; Rosenblom, Jan
- CS Fac. Pharm., Stockholm, Swed.
- SO Acta Chemica Scandinavica, Series B: Organic Chemistry and Biochemistry ( 1974), 28(2), 239-43 CODEN: ACBOCY: ISSN: 0302-4369
- DT Journal
- LA English

- AB (-)-Cryptostyline I, II, and III, together with 1-(3,4-methylenedioxyphenyl)6,7-dimethoxy-2-methyl-3,4-dihydroissquinolinium iodide and 1-(3,4methylenedioxyphenyl)-6,7-dimethoxy-2-methylisoquinolinium chloride have been isolated from Cryptostylis erythroglossa. The biosynthesis of (-)cryptostyline I has been studied using radioactive precursors and the position of the radio-label determined by degradation The biosynthetic results show that tyrosine and 3,4-dihydroxyphylalanine as well as tyramine and dopamine are specifically incorporated. The finding that 3-hydroxy-4methoxyphenethylamine is better incorporated than the isomeric 4-hydroxy-3methoxy-phenethylamine suggests that the ring closure to the terrahydroisoquinoline skeleton is facilitated by a para-hydroxy group.
- tetrahydroisoquinoline skeleton is facilitated by a para-hydroxy group IT 33933-36-2 RL: BOC (Biological occurrence); BSU (Biological study, unclassified);

RL: BOC (Biological occurrence); BSU (Biological Study, unclassified)
BIOL (Biological study); OCCU (Occurrence)
(of Cryptostylis erythroglossa)

RN 33033-86-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

- L5 ANSWER 51 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1973:525682 CAPLUS Full-text
- DN 79:125682
- OREF 79:20407a,20410a
- TI Syntheses of heterocyclic compounds. DXXVII. Absolute configuration of 1,2,3-4-tetrahydro-1-phenylisoquinolines
- AU Kametani, Tetsuji; Shibuya, Shiroshi; Sugi, Hideo; Fukumoto, Keiichiro
- CS Pharm. Inst., Tohoku Univ., Sendai, Japan
- SO Journal of Heterocyclic Chemistry (1973), 10(4), 451-3 CODEN: JHTCAD; ISSN: 0022-152X
- DT Journal
- LA English
- AB The absolute configuration at the C-1 position of 1,2,3,4-tetrahydro-1phenylisoguinolines can be deduced from the CD curves of either the free base or its methiodide. The absolute configuration of (+)-2-amino-1-(3hydroxyphenyl)ethanol was revised and found to have R-configuration.
- IT 43090-69-8P
- RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and circular dichroism of)
- RN 43090-64-8 CAPLUS
- CN Isoquinolinium, 1,2,3,4-tetrahydro-6,7-dimethoxy-2,2-dimethyl-1-(3,4,5-trimethoxyphenyl)-, iodide, (S)- (9CI) (CA INDEX NAME)

IT 43090-65-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 43090-65-9 CAPLUS

CN Isoquinolinium, 1,2,3,4-tetrahydro-6,7-dimethoxy-2,2-dimethyl-1-(3,4,5-trimethoxyphenyl)-, iodide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 22325-16-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

RN 33033-86-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- L5 ANSWER 52 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1973:159937 CAPLUS Full-text
- DN 78:159937
- OREF 78:25687a,25690a
- TI Orchidaceae alkaloids. XXXIV. Absolute configuration of cryptostyline I, II, and III. Three 1-phenyl-1,2,3,4-tetrahydroisoquinolines from Cryptostylis fulva
- AU Leander, Kurt; Luning, Bjorn; Westin, Leif
- CS Dep. Org. Chem., Univ. Stockholm, Stockholm, Swed.
- SO Acta Chemica Scandinavica (1947-1973) (1973), 27(2), 710
- CODEN: ACSAA4; ISSN: 0001-5393
- DT Journal
- LA English
- GI For diagram(s), see printed CA Issue.
- AB Cryptostyline I, II and III isolated from Cryptostylis fulva had structures I,
- II, and III, resp., based on CD and x-ray crystallog. IT  $22325{-}16{-}2$
- RL: PRP (Properties)
- (structure and configuration of)
- RN 22325-16-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

 $L_5$ ANSWER 53 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

1973:111557 CAPLUS Full-text AN

DN 78:111557

OREF 78:17915a,17918a

ΤI Absolute configuration of cryptostylines I, II, and III by x-ray analysis and aromatic chirality method

AU Blount, J. F.; Toome, V.; Teitel, S.; Brossi, A.

CS Chem. Res. Dep., Hoffman-LaRoche Inc., Nutley, NJ, USA

SO Tetrahedron (1973), 29(1), 31-9 CODEN: TETRAB; ISSN: 0040-4020

Journal DT

LA. English

OS CASREACT 78:111557

GΙ For diagram(s), see printed CA Issue.

AB Single crystal x-ray anal. of unnatural cryptostyline II (I, R = Me) hydrobromide established its absolute configuration as R. Thus, the natural isomer (II, R = H, R1 = R2 = OMe) and the related alkaloids cryptostyline I (II, R = H, R1R2 = OCH2O) and cryptostyline III (II, R = R1 = R2 = OMe) have S configurations. The orthorhombic crystals of I.HBr (R = Me), space group P212121, had a 10.162, b 12.352, c 16.456 Å, d.(observed) 1.37, and d.(calculated) 1.364, for Z = 4. The structure was solved by the heavy atom method and refined by least squares to R 0.031 for 1882 observed reflections. The configuration was confirmed by the aromatic chirality method and by the CD spectrum of the monophenol (I, R = H).

ΙT 22325-16-2

> RL: PRP (Properties) (absolute configuration of)

RN 22325-16-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

ANSWER 54 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN L5 AN 1973:4145 CAPLUS Full-text

DN 78:4145

OREF 78:691a,694a

TT Optically active 1-phenylisoquinolines

IN Kametani, Tetsuji

PA Grelan Pharmaceutical Co., Ltd.

Jpn. Kokai Tokkyo Koho, 6 pp. SO

CODEN: JKXXAF

Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 47025183	B4	19721019	JP 1971-13124	19710312 <
AB	Optically inactive	1-pheny	lisoguinolin	es were treated with o	optically act

Optically inactive 1-phenylisoquinolines were treated with optically active salt forming agent so that one of the optically active salts could be selectively crystallized E.g., 1.2,3.4-tetrahydro-o,p-dimethoxy-1-(3,4,5trimethoxyphenyl)isoquinoline, prepared by reduction of the corresponding 3,4dihydro compound, was treated with di-p-toluoyl-(+)-tartaric acid in Me2CO and the separated crystals decomposed with Na2CO3 solution to give (-)-compound 32886-69-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

32886-69-4 CAPLUS RN

Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-CN , (S)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

33033-84-0

RL: PROC (Process) (resolution of)

RN 33033-84-0 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

- L5 ANSWER 55 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1972:72372 CAPLUS Full-text
- DN 76:72372

OREF 76:11649a,11652a

- TI Isoquinoline derivatives. V. Synthesis of some 1-substituted 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline-4-spirocyclopentanes and their analogs
- AU Mndzhoyan, A. L.; Markaryan, E. A.; Arustamyan, Zh. S.; Marashyan, E. S.
- CS Inst. Tonkoi Org. Khim., Erevan, USSR
- SO Khimiya Geterotsiklicheskikh Soedinenii (1971), 7(5), 637-40 CODEN: KGSSAO; ISSN: 0132-6244
- DT Journal
- LA Russian
- For diagram(s), see printed CA Issue.
- AB A series of the title compds. (I, R = H, MeO; R1 = H, MeO; R2 = MeO, H; n = 0, 1) [prepared by Bischler-Napieralski reaction of the 1-amidomethyl-1-(3,4-dimethoxyphenyl)cyclopentane (II, n = 0, 1) in boiling PhMe with PCCl3 and subsequent reduction with LiAlH4 of the 1,2-double bond in the 6,7-dimethoxy-3,4-dihydroisoquinoline-4-espirocyclopentane (III, n = 0, 1) [1], and the 1-aminomethyl-1-(3,4-dimethoxyphenyl)cyclopentanes (IV, n = 0, 1) (prepared fror II by reduction with LiAlH4) in the form of their hydrochlorides produced a decrease in blood pressure of about 30 mm of Hg when given intravenously in a dose 1-3 mg/kg. II were prepared from the corresponding amines (V) (obtained from 3,4-(MeO)2C6H4-CH2CN via alkylation with Br(CH2)4Br in the presence of NaNH2 followed by reduction with LiAlH4) and acid chlorides in C6H6 in the presence of stoichiometric amts. of pyridine.
- IT 34976-64-2
- RL: PROC (Process) (preparation of)
- RN 34976-64-2 CAPLUS
- CN Spiro[cyclopentane-1, 4'(1'H)-isoquinoline],
  - 2',3'-dihydro-6',7'-dimethoxy-1'-(3,4,5-trimethoxyphenyl)-, hydrochloride
    (1:1) (CA INDEX NAME)

● HC1

# OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L5 ANSWER 56 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1971:529977 CAPLUS Full-text
- DN 75:129977
- OREF 75:20531a,20534a
- TI Synthesis and absolute configuration of cryptostylines I, II, and III
- AU Brossi, A.; Teitel, S.
- CS Chem. Res. Dep., Hoffmann-La Roche Inc., Nutley, NJ, USA
- SO Helvetica Chimica Acta (1971), 54(6), 1564-71 CODEN: HCACAV; ISSN: 0018-019X
- DT Journal
- LA English
  - GI For diagram(s), see printed CA Issue.
  - AB The title compds. [I (RR1 = OCH2O, R2 = H; R = R1 = OMe, R2 = H; R = R1 = R2 = OMe)] were prepared by the reductive N-methylation of secondary norcryptostylines. The natural I possessed the (S) configuration. The reported easy racemization ability of the natural I was traced to optical impurities in the original preparation
  - IT 32886-69-4P
    - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and O.R.D. of)
  - RN 32886-69-4 CAPLUS
  - CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl), (S)- (9CI) (CA INDEX NAME)

- IT 33033-86-2P
  - RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and absolute configuration of)
- RN 33033-86-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-

trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 22325-16-2P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and absolute configuration of, O.R.D. and)

22325-16-2 CAPLUS

RN

Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-CN trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

33033-84-0P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and resolution of)

33033-84-0 CAPLUS

RN

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

32886-70-7P 33755-95-2P 33770-51-3P

## 10/591,174

33838-85-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 32886-70-7 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl), (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 33755-95-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, hydrobromide, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 33770-51-3 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, hydrobromide (1:1), (1S)- (CA INDEX NAME)

RN 33838-85-6 CAPLUS

CN L-xylo-Hexulofuranosonic acid, 2,3:4,6-di-O-isopropylidene-, α-, compd. with (S)-(-)-1,2,3,4-tertanlydro-6,7-dlmethoxy-1-(3,4,5-trimethoxyphenyl)isoquinoline (1:1) (8CI) (CA INDEX NAME)

CM

CRN 32886-69-4 CMF C20 H25 N O5

Absolute stereochemistry.

CM

CRN 18467-77-1

CMF C12 H18 O7

Absolute stereochemistry. Rotation (-).

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L5 ANSWER 57 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

## 10/591,174

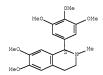
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1971:464052 CAPLUS Full-text
ΑN
DN
    75:64052
OREF 75:10159a,10162a
TΤ
    Synthesis of heterocyclic compounds. CCCXCVII. Absolute configuration of
     cryptostyline. III
ΑU
     Kametani, T.; Sugi, H.; Shibuya, S.
CS
    Pharm. Inst., Tohoku Univ., Sendai, Japan
SO
    Tetrahedron (1971), 27(12), 2409-14
    CODEN: TETRAB: ISSN: 0040-4020
DT
    Journal
LA
    English
GI
    For diagram(s), see printed CA Issue.
AB
    Optical resolution of (±)-1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-
```

For diagram(s), see pinted the issue.
A Optical resolution of (±)-1,2,3,4-terrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)isoquinoline [(±)-1] with di-p-toluoyl-(+)-tartaric acid gave (-)-(1) and (+)-1,2,3,4-tetrahydro-6,7-dimethoxy-1-3,4,5-trimethoxyphenyl)isoquinoline. I was transformed to (+)-cryptostyline III (II). A method for the stereochem study of cryptostyline III by correlation of ORD and CD spectra with those of (+) (R)-1,2,3,4-tetrahydro-6-methoxy-2-methyl-1-phenylisoquinoline.

IT 22325-16-2 RL: PRP (Properties) (configuration of, absolute)

RN 22325-16-2 CAPLUS
CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyohenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



with (S)-1,2,3,4-tetrahydro-6,7-dimethox $\bar{y}$ -1- $(\bar{3},4,5$ -trimethoxyphenyl)isoquinoline (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 32886-69-4 CMF C20 H25 N O5

CM 2

CRN 32634-68-7 CMF C20 H18 O8

Absolute stereochemistry. Rotation (+).

RN 32886-69-4 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-, (\$)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 32886-70-7 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl), (R)- (9CI) (CA INDEX NAME)

RN 33033-85-1 CAPLUS

CN Butanedioic acid, 2,3-bis[(4-methylbenzoyl)oxy]-, [R-(R\*,R\*)]-, compd. with (R)-1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)isoquinoline (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 32886-70-7 CMF C20 H25 N O5

Absolute stereochemistry.

CM

CRN 32634-66-5

CMF C20 H18 O8

Absolute stereochemistry. Rotation (-).

RN 33033-86-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (R)- (9CI) (CA INDEX NAME)

IT 33033-84-0

RL: PROC (Process) (resolution of)

RN 33033-84-0 CAPLUS

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- L5 ANSWER 58 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1969:106718 CAPLUS Full-text
- DN 70:106718
- OREF 70:19943a,19946a
- TI Orchidaceae alkaloids, XI, Three
  - 1-phenyl-1,2,3,4-tetrahydroisoquinolines from Cryptostylis fulva
- AU Leander, Kurt; Luning, Bjorn; Ruusa, Ene
- CS Univ. Stockholm, Stockholm, Swed.
- SO Acta Chemica Scandinavica (1947-1973) (1969), 23(1), 244-8
- CODEN: ACSAA4; ISSN: 0001-5393
- DT Journal
- LA English
- AB Three 1-phenyl-2-methyl-6,7-dimethoxy-1,2,3,4-tetrahydroiso-quinolines were isolated from C. fulva. The 3 alkaloids differ in the substitution pattern of the 1-phenyl group, being 3,4-methylenedioxy, 3,4-dimethoxy, and 3,4,5-trimethoxy, resp. Their structures were assigned by spectral methods and by synthesis.
- Synchesis
- RL: RCT (Reactant); RACT (Reactant or reagent) (new alkaloid from Cryptostylis fulva, structure of)
- RN 22325-16-2 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)-, (1S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT 22324-83-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of) RN 22324-83-0 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5trimethoxyphenyl)- (CA INDEX NAME)

#### OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L5 ANSWER 59 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1965:93561 CAPLUS Full-text

DN 62:93561

OREF 62:16783g-h

- TI Pharmacological activity of some papaverine analogs. II
- AU Sheikova, Zh.; Nikolova, M
- SO Izvestiya na Instituta po Fiziologiya, Bulgarska Akademiya na Naukite ( 1964), 7, 243-52

CODEN: IIFBA4; ISSN: 0068-3922

- DT Journal
- LA Bulgarian
- AB cf. CA 60, 14672h. The spasmolytic activity of the nicotinoyl, isonicotinoyl, and furanoyl derivs. were lower than papaverine (I). The o-methoxyphenol and trimethoxyphenol derivs. had equal or superior spasmolytic effects. The nonhydrated compds. of these derivs. had a depressive effect on the central nervous system, while the hydrated compds. had a stimulant effect. All compds., except those containing furanoyl and o-methoxyphenyl groups were less toxic than I.
- IIT 33033-89-0, Isoquinoline,
   1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl) (antispasmodic activity of)
- RN 33033-84-0 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

- L5 ANSWER 60 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1965:93560 CAPLUS Full-text
- DN 62:93560
- OREF 62:16783e-q
- TI Relations between chemical structure and pharmacological actions in a series of  $\gamma$ -lactones and amino alcohols
- AU Zavrazhnov, V. I.; Ponomarev, F. G.; Trukhacheva, L. I.
- CS Med. Inst., Voronezh
- SO Elektron. i Khim. v Kardiol., Voronezhsk. Obl. Obshchestvo Kardiologov, Voronezhsk. Obl. Obshchestvo Terapevtov (1964) 348-58
- DT Journal
- LA Russian
- The effects were investigated of synthetic derivs. of  $\alpha$ -aceto- $\gamma$ -butyrolactone AB (I), Et acetoacetate, morpholine (II) derivs., and derivs. of diethylaminopropanediol ether (III) on perfused blood vessels of frog's hind limb and of isolated rabbit ear, on rabbit intestinal strips in vitro, and on rabbit blood pressure. The L.D.100 was determined in mice. The introduction of Me and vinyl groups in the  $\beta$ -position or in both  $\beta$ - and  $\gamma$ -positions of I caused a reversal of its pharmacol. properties: the derivs. have a spasmolytic activity on blood vessels without any influence on systemic blood pressure and intestinal smooth muscle. Methylation in the  $\beta$ -position or in both  $\beta$ - and  $\gamma$ positions enhanced the vasopressor activity of I. The introduction of MeOCH2, ProCH2, and iso-ProCH2 groups into I in the Y-position caused an increase of pressor properties; substitution of the propoxy group in the γ-position with Cl decreased the pressor activity of the compound and toxicity but had a neg. influence on intestinal peristaltic movements. Substitution of H. in the NH group of II derivs, by aliphatic groups caused an increase of pressor properties and toxicity. From 7 derivs. of III the most active ones were benzyl and Et derivs. which decreased rabbit blood pressure and caused a constriction of ear and limb blood vessels. All III derivs, inhibited the movements and tonus of the rabbit intestine.
- IT 33032-84-0, Isoquinoline,
   1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl) (antispasmodic activity of)
- RN 33033-84-0 CAPLUS
- CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)

- L5 ANSWER 61 OF 61 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 1955:84276 CAPLUS Full-text
- DN 49:84276

OREF 49:15902h-i,15903a-i

- TI Chemistry of vanillin and its derivatives. VI. Effective spasmolytic l-phenylisoguinolines and diphenethylamines containing the guaiacyl grouping
- AU Kratzl, K.; Horejschi, T.; Billek, G.
- CS Univ. Vienna
- SO Monatshefte fuer Chemie (1954), 85, 1154-65 CODEN: MOCMB7; ISSN: 0026-9247
- DT Journal
- LA Unavailable
- OS CASREACT 49:84276
- AB cf. C.A. 48, 136
  - cf. C.A. 48, 1363q. Several 1-phenylisoquinolines were prepared from 4-(2aminoethyl)guaiacol (I) and its benzyl ether (II), by forming amides, treating these with POC13, and dehydrogenating. The following amides were prepared by treatment with the corresponding acvl or alkyl chloride (starting material, yield, and m.p. given): BzNHCH2CH2C6H3(OH)OMe-4,3, I, 94, 127°; BzNHCH2CH2C6H3(OBz)OMe-4,3 (III), I, -, -; BzNHCH2CH2C6H3(OCH2Ph)OMe-4,3 (IV), I (or II), 76, 134°; 3,4-MeO(AcO)C6H3CONHCH2CH2C6H3(OH)OMe-4,3, I, 89, 117-20°; 3,4-MeO-(BzO)C6H3CONHCH2CH2C6H3(OH)OMe-4,3 (V), I, 95, 133-6°; 3,4-MeO(PhCH2O)C6H3CONHCH2CH2C6H3(OH)OMe-4,3 (VI), I, 93, 146-7°; 3,4-MeO(BzO)C6H3CONHCH2CH2C6H3(OBz)OMe-4.3, V. 87, 154-5°; 3.4-MeO(PhCH2O)C6H3CONHCH2CH2C6H3(OBz)OMe-4,3, VI, 90, 143°; 3,4-MeO(PhCH2O)C6H3CONHCH2CH2C6H3(OCH2Ph)OMe-4,3 (VII), IV or II, 75-89, 167°; and 3,5,4-(MeO)2(PhCH2)OC6H3CONHCH2CH2C6H3(OCH2Ph)OMe-4,3 (VIII), II, 67, 125°. For the ring-closure, 5 millimoles of the amide was treated with 12.5 millimoles POC13 in 60 ml. absolute xvlene or PhMe at reflux for 20-60 min. The product was precipitated as a resinous mass by addition of petr. ether. The free base could be precipitated from dilute HCl solution (containing EtOH if necessary) by NH3 and recrystd. from EtOH-H2O. The hydrochloride could be recovered instead by excess concentrated HCl. The picrate was prepared from the free base with picric acid or from the hydrochloride with sodium picrate. In this way were made the following 3,4-dihydroisoquinolines and derivs. (substituents, starting compound, % vield, m.p. given): 7-benzovloxy-6methoxy-1-phenyl (IX), III, 78, 191-2° (picrate, m. 210-12°; hydrochloride, m. 209-12°); 7-benzyloxy-6-methoxy-1-phenyl, IV, 88, 137° (hydrochloride, m. 199°); 7-benzyloxy-1-(4-benzyloxy-3- methoxyphenyl)-6-methoxy (X), VII, 79, -(picrate, m. 203°); 7-benzyloxy-1-(4-benzyloxy-3,5-dimethoxyphenyl)-6-methoxy (XI), VIII, 77, - (picrate, m. 232°). Hydrolysis of IX with aqueous EtOH-NaOH gave 93% 6-methoxy-1-phenyl-3.4-dihydro-7-isoguinolinol, m. 180° (picrate, m. 240°; hydrochloride, m. 210-12°). Treatment of X with 20% HCl and recrystn. from dilute HC1 gave 93% 1-(4-hydroxy-3-methoxyphenyl)-6-methoxy-3,4-dihydro-7-isoquinolinol hydrochloride (m. 258°). Similarly, XI gave 92% 1-(4-hydroxy-3,5-dimethoxyphenyl)-6-methoxy-3,4-dihydro-7-isoquinolinol hydrochloride (m.

234°, with 1 mol. H2O). The free bases (XII and XIII) could be obtained with K2CO3. Hydrogenation and recrystallization from EtOH or dilute HCl gave from XII 94% 1-(4-hydroxy-3-methoxyphenyl)-6-methoxy-1,2,3,4-tetrahydro-7isoquinolinol hydrochloride (m. 182°), and from XIII 92% 1-(4-hydroxy-3,5dimethoxyphenyl)-6-methoxy-1,2,3,4-tetrahydro-7- isoquinolinol hydrochloride (m. 150°, with 1 mol. H20). The free bases (XIV and XV) were obtained by K2CO3 treatment. Pd dehydrogenation gave from XI 90% 7-benzoyloxy-6-methoxy-1-phenylisoquinoline (XVI) (oil); from XIV 50% 1-(4-hydroxy-3-methoxyphenyl)-6-methoxy-7-isoguinolinol (hydrochloride, from EtOH-2N HCl. m. 240°; picrate, m. 220°); and from XV 56% 1-(4-hydroxy-3,5-dimethoxyphenyl)-6-methoxy-7isoquinolinol (hydrochloride, from dilute HCl, m. 217°; picrate, m. 242-3°). Hydrolysis of XVI with aqueous EtOH-NaOH gave 75% 6-methoxy-1-phenyl-7isoquinolinol (hydrochloride, m. 145-7°; picrate, m. 221-2°). 4-Benzyloxy-3,5-dimethoxybenzoic acid (XVII) (55.6%, m. 155-7° from EtOH-H2O) was prepared from 2 g, syringic acid with PhCH2Cl and KOH in EtOH. XVII formed 4benzyloxy-3,5-dimethoxybenzoyl chloride (85%, m. 45°) with SOC12 at 50-70°. Syringaldehyde (XVIII) (48%, m. 110-12°, from H2O) was prepared from 6.2 g. 5methoxyprotocatechualdehyde with 12.6 g. Me2SO4 in 40 ml. H2O containing 9.3 g. NaOH, then acidification with HCl. XVIII sodium salt gave 62.5% 4,3,5-PhCH2O(MeO)2C6H3CHO (XIX) (m. 63° from EtOH) with PhCH2C1 in xylene. XIX (3.2 g.) in 25 ml. absolute EtOH with 0.8 g. MeNO2, 0.13 g. MeNH2.HCl, and 0.1 g. Na2CO3 was heated 24 hrs. at 40° to give 65% 4,3,5-PhCH2O (MeO)2, C6H3CH:CHNO2 (m. 133° from C6H6-EtOH). [3,4-MeO(PhCH2O)C6H3]2NH.HCl (XX) (m. 205-10° from EtOH) was prepared two ways: (A) 0.5 g. 3,4-MeO(PhCH2O)C6H3CH:CHNO2 was dissolved in 17 ml. HOAc plus 12 ml. C6H6. The solution was dropped into 50 mg. PtO2 in 3 ml. HOAc under H. After taking up 150 ml. H, the solution was filtered and evaporated to 20 ml. under reduced pressure. Addition of concentrated HCl precipitated 51% XX; (B) 1 g. 3,4-MeO(PhCH2O)C6H3CH2CH:NOH was dissolved in 35 ml. EtOH and added to 50 mg. PtO2 in 5 ml. EtOH under H. After absorption of 165 ml. H, XX (38%) was recovered as in A. XX (1 g.) was heated 3 hrs. at 130-40° with 14 ml. 38% formalin, the mixture was cooled and 2N HCl added to give 80% 4.4'-bisbenzyloxy-3.3'-dimethoxy-Nmethyldiphenethylamine hydrochloride (m. 176-8°, from EtOH containing concentrated HCl; 1/2 mol. H2O of crystallization). XX (0.5 g.) on hydrolysis with 10 ml. concentrated HCl in 10 ml. EtOH gave 88% 4,4'iminodiethylenediquaiacol hydrochloride (m. 205-8°, from concentrated HCl). All the isoquinolines, phenethylamines, and intermediates showed 1/5 to 1/20

the spasmolytic activity of papaverine.

IT 655737-16-5P, 7-Isoquinolinol,
1,2,3,4-tetrahydro-1-(4-hydroxy-3,5-dimethoxyphenyl)-6-methoxy-,
hydrochloride 855737-18-7P, 7-Isoquinolinol,
1,2,3,4-tetrahydro-1-(4-hydroxy-3,5-dimethoxyphenyl)-6-methoxyRL: PREP (Preparation)

(preparation of) RN 855737-16-5 CAPLUS

CN 7-Isoquinolinol, 1,2,3,4-tetrahydro-1-(4-hydroxy-3,5-dimethoxyphenyl)-6-methoxy-, hydrochloride (1:1) (CA INDEX NAME)

- RN 855737-18-7 CAPLUS
- 7-Isoquinolinol, 1,2,3,4-tetrahydro-1-(4-hydroxy-3,5-dimethoxyphenyl)-6-CN methoxy- (CA INDEX NAME)

- => s 14 not 15
- L6 14 L4 NOT L5
- => dis 16 1-14 bib abs fhitstr
- L6 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- 2007:703811 CAPLUS Full-text AN
- DN 147:118219
- ΤI Preparation of isoquinoline aminopyrazole derivatives for the treatment of cancer
- Chen, Li; Georges, Guy; Mertens, Alfred; Wu, Xihan IN
- PA F. Hoffmann-La Roche AG, Switz.
- PCT Int. Appl., 334pp. SO
- CODEN: PIXXD2
- DT Patent
- English LA

FAN.	CNT 1																
	PATENT I	NO.			KIN	D	DATE			APPL	ICAT:	ION	NO.		D	ATE	
						-											
PI	WO 2007	0713	48		A1		2007	0628	1	WO 2	006-1	EP12	112		2	0061	215
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		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,

												, MR,						
			GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
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	US	2007	0179	151		A1		2007	0802		US	2006-	6377	33		2	0061	212
	US	7572	809			B2		2009	0811									
	AU	2006	3289	97		A1		2007	0628		AU	2006-	3289	97		2	0061	215
	CA	2633	101			A1		2007	0628		CA	2006-	2633	101		2	0061	215
	EP	1966	190			A1		2008	0910		EΡ	2006-	8409	91		2	0061	215
		R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE	, ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LI,	LT,	LU,	LV,	MC,	NL,	PL	, PT,	RO,	SE,	SI,	SK,	TR	
	JP	2009	5199	18		T		2009	0521		JP	2008-	5448	87		2	0061	215
	NO	2008	0026	43		A		2008	0901		NO	2008-	2643			2	0080	605
	MX	2008	0076	24		A		2008	0701		MX	2008-	7624			2	0080	612
	ZA	2008	0051	63		A		2009	0624		ZA	2008-	5163			2	0080	612
	KR	2008	0769	63		A		2008	0820		KR	2008-	7148	69		2	0080	619
	CN	1013	4114	5		A		2009	0107		CN	2006-	8004	8040		2	0080	619
	IN	2008	CN03	084		A		2009	0306		IN	2008-	CN30	84		2	0080	619
PRAI	EP	2005	-277	20		A		2005	1219									
	WO	2006	-EP1	2112		W		2006	1215									

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 147:118219

RN

- AB The title compds. I [Rl = H, alkyl, cycloalkyl, R2 = H or alkyl, R3 = (un)substituted alkyl, aryl, heteroaryl, etc.; R33 = H, alkyl or alkoxy; R4 = H, alkyl, alkoxy, etc.; R5 = H, alkyl, alkoxy, etc. or R5 and R6 can form together with the carbon atoms to which they are attached a 5-6 membered heterocyclic ring; X = a bond, O, S, C(O), etc.], useful in the control or prevention of illnesses such as cancer, were prepared and formulated. E.g., a multi-step synthesis of II, starting from l-indanone, was given. II showed IC50 of 0.066 µM against Aurora A kinase.
- T 942932-52-7P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of isoquinolinylamino pyrazoles for the treatment of cancer) 942932-52-7 CAPLUS

CN 3-Isoquinolinamine, 1-(3,5-difluorophenyl)-6-methoxy-N-1H-pyrazo1-3-yl-(CA INDEX NAME)

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSMER 2 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2007:565283 CAPLUS <u>Full-text</u>
DN 146:528334
TI Novel colored solutions of injectable drugs and their salts
IN Winch, Peter D.
PA Winch, Peter, D., USA
SO PCT Int. Appl., 121 pp.

CODEN: PIXXD2 DT Patent

LA English FAN.CNT 1

PAN.		ENT :	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
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PI	WO	2007	0590	19		A2		2007	0524		WO 2	006-	US43	963		2	0061	113
	WO	2007	0590	19		A3		2008	0710									
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JΡ,	KΕ,	KG,	KM,	KN,
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	EP	1951																
		R:						CZ,										
				HR,			LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	51,	SK,	TR,	AL,
	TD	2009			PIP.			2009	0.416		TD 2	000	E 400	42		2	0061	112
		1014						2009										
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DDAT		2005						2005			05 2	000-	9333	4		2	0001	110
ENAI	115	2005	-735.	372D		D		2005										
	TIE	2005 2005	_736	373D		D		2005										
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US 2005-736574P
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US 2005-736575P
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US 2005-736576P
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US 2005-736577P
                     Р
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US 2005-736578P
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                            20051114
US 2005-736579P
                      Р
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US 2006-761274P
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US 2006-761276P
                     Р
                            20060123
US 2006-761277P
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                            20060123
US 2006-761282P
                     Р
                            20060123
US 2006-761283P
                     Р
                            20060123
WO 2006-US43963
                            20061113
                     747
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- AB The invention is directed to pharmaceutical compns. comprising colored solns., colored emulsions, or colored powders of injectable pharmaceuticals wherein the pharmaceuticals are selected from the group consisting of muscle relaxants, hypnotics, induction agents, and anticholinergics. The formulations of the present invention may all be colored using fluorescein. Different colors may be achieved by either varying the concentration of fluorescein, or by combining fluorescein with another dye. The invention is also directed to methods involving the use of said pharmaceutical compns. A sterile aqueous solution contains atracurium besylate 10 mg/mL, and fluorescein (10 mg), wherein the pH of the solution is adjusted to 3.5 with benzenesulfonic acid.
- TT 213998-46-0
  - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (colored solns. of injectable drugs and their salts)
- RN 213998-46-0 CAPLUS
  CN Isocuinolinium, 2-13-[[(2Z)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4
  - tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2). (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

●2 C1-

PAGE 1-B

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L6 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
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AN 2007:284437 CAPLUS Full-text

DN 146:337745

TI Preparation of tetrahydroisoquinoline derivatives as IGF-1 receptor inhibitors

IN Gunzinger, Jan; Leander, Kurt

PA Analytecon SA, Switz.

SO PCT Int. Appl., 52pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PAT	ENT I	.00			KIN		DATE			APP	LICAT	ION :	NO.		D	ATE		
PI	WO	2007	0291	07				2007	0315		wo	2006-	IB24	74		2	0060	908	
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		R:										, ES,							
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		1012							1008			2008- 2006-							
		2008							0714			2008-							
		2008							0704			2008-							
		2009							0416			2008-					0080		
DDAT		2005						2005			00	2000-	J J I J	J 1		2	0000	410	
		2005						2005											
		2006				W		2006											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 146:337745; MARPAT 146:337745

Page 203 of 219

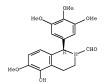
$$R^{6}$$
 $R^{5}$ 
 $R^{4}$ 
 $R^{7}$ 
 $R^{7$ 

- AB The title compds. with general formula I [wherein R4 = H, OH, CN, CF3, etc.; R2 = H, Me, Et, etc.; R5 = H, alkyl, OH, etc.; R6 = Me, halo, alkoxy, etc.; n = 1-2; R7 and R8 = independently OH, Me, Et, methoxy, etc.; U = N or CR1, where R1 = H, alkyl, alkoxy, etc.; V = N or CR3, where R3 = H, OH, halo, etc.; W = N or CR9, where R9 = H, OH, halo, etc.; CM = N or CR9, where R9 = H, OH, halo, etc.; CM = N or CR9, where R9 = H, OH, halo, etc.; CM = N or CR9, where R9 = H, OH, halo, etc.; CM = Salts thereof are prepared as inhibitors of IGF-1 receptor. For example, compound II and its prodrug, (1R)-1.(3,4,5-trimethoxyphenyl)-2-formyl-5-(dihydrogen phosphate)-6-methoxy-1,2,3,4-tetrahydroisoquinoline, were prepared from a multi-step synthesis. II showed IC50 values of 50 nM and 40 nM for the inhibition of phospho-MAPK (Erkl/2) and phospho-AKT, resp. I, as inhibitors of IGF-1R, are useful in the treatment of diseases such as but not limited to cancer, atherosclerosis, and psoriasis (no data).
- IT 929050-66-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; preparation of tetrahydroisoquinoline derivs. as IGF-1 receptor inhibitors)

- RN 929050-66-8 CAPLUS
- CN 2(1H)-Isoquinolinecarboxaldehyde, 3,4-dihydro-5-hydroxy-6-methoxy-1-(3,4,5-trimethoxyphenyl)-, (1R)- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L6 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2007:64394 CAPLUS Full-text
- DN 146:229193
  - II Preparation of isoquinoline derivatives for treatment of tumor

- Zhao, Yu; Ding, Hongxia; Lu, Wei
- PA Zhejiang University, Peop. Rep. China
- Faming Zhuanli Shenging Gongkai Shuomingshu, 38 pp. SO CODEN: CNXXEV
- Patent
- LA Chinese FAN CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1896065	A	20070117	CN 2005-10082721	20050711
	CN 101440096	A	20090527	CN 2008-10189046	20050711
	CN 101440097	A	20090527	CN 2008-10189066	20050711
PRAI	CN 2005-10082721	A3	20050711		

CASREACT 146:229193; MARPAT 146:229193 OS.

- The title 1-(3',4',5'-trisubstituted phenvl)isoquinoline derivs. I [R1-R3 = AR independently H, alkoxy, benzyloxy, hydroxy, halo, or amino; or R1 and R2 = -OCH20- or -OCH2CH2O-; R4-R6 = independently alkoxy, benzyloxy, hydroxy, halo, or amino; or R4 and R5 or R5 and R6 = -OCH2O- or -OCH2CH2O-; R7 = absence, H, (un) substituted benzoyl, or cyclopropylcarbonyl; with provisos], or pharmaceutically acceptable salts, solvates, or mixts. thereof were prepared for the treatment of tumor (no data). For example, II was prepared in a multi-step synthesis. The compds. showed excellent antitumor activity.
- 903527-19-5P ΙT
  - RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
- (drug candidate; preparation of isoquinoline derivs. for treatment of tumor)
- RN 903527-19-5 CAPLUS
- Isoquinoline, 1-[3,5-dimethoxy-4-(phenylmethoxy)phenyl]-1,2,3,4-tetrahydro-CN 6,8-dimethoxy-7-(phenylmethoxy)- (CA INDEX NAME)

L6 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:1238764 CAPLUS Full-text

DN 146:229148

TI Synthesis and anticoagulant activity of 1-aryl derivatives of tetrahydroisoquinolines

AU Glushkov, V. A.; Arapov, K. A.; Minova, O. N.; Ismailova, N. G.; Syropyatov, B. Ya.; Shklyaev, Yu. V.

CS Perm State University, Perm, Russia

т

SO Pharmaceutical Chemistry Journal (2006), 40(7), 363-366 CODEN: PCJOAU; ISSN: 0091-150X

PB Springer

DT Journal

LA English

OS CASREACT 146:229148

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Me O Ne Me

AB A series of 1-aryl-3,3-dimethyl-3,4-dihydroisoquinolines, e.g., I (R = H, Br, NO2 or MeO), were obtained by three-component (one-pot) condensation of veratrole, isobutylene oxide, and aromatic nitriles and then reduced to the corresponding 1,2,3,4-tetrahydroisoquinolines. Hydrochlorides of the synthesized compds. were tested for anticoagulant activity.

II 324910-76-99

11 924910-76-9

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and anticoagulant activity of aryl dihydro- and tetrahydroisoquinoline derivs. via three-component heterocyclization of veratrole with isobutylene oxide and aromatic nitriles followed by

reduction

with hydrides)

RN 924910-76-9 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6,7-dimethoxy-3,3-dimethyl-1-(3,4,5-trimethoxyphenyl)-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2006:679649 CAPLUS <u>Full-text</u> DN 146:287203

TI GW280430A (AV430A), a new ultrashort-acting nondepolarizing neuromuscular blockers

AU Xu, Ji-hong; Zheng, Si-iu

CS Department of Anesthesiology, General Hospital of Shenyang Command, Shenyang, 110016, Peop. Rep. China

SO Guowai Yixue Mazuixue Yu Fusu Fence (2005), 26(5), 295-297 CODEN: GYMYAS; ISSN: 1001-1005

PB Guowai Yixue Mazuixue Yu Fusu Fence Bianjibu

DT Journal; General Review

LA Chinese

AB A review. GW280430A had such characteristics as rapid effects, short action time, no accumulation and few bad responses, so it was the most promising non-depolarization muscle relaxing medicine which could replace succinylcholine. In this paper GW280430A (AV430A), a new ultrashort-acting nondepolarizing neuromuscular blockers is discussed.

IT 213998-46-0, GW280430A

R1: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (GW280430A (AV4308A), new ultrashort-acting nondepolarizing neuromuscular blockers)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1, 4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

PAGE 1-B

L6 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:1309229 CAPLUS Full-text

DN 144:304254

TI Muscle relaxants 2006: A clinical and basic science update and commentary

AU Lee, Chingmuh; Katz, Ronald L. CS Department of Anesthesiology.

 $\ensuremath{\mathsf{CS}}$  Department of Anesthesiology, Harbor-UCLA Medical Center, Torrance, CA, USA

SO Seminars in Anesthesia, Perioperative Medicine and Pain (2005), 24(3), 154-164 CODEN: SAPPFJ; ISSN: 1547-9951

PB Elsevier Inc.

DT Journal; General Review

LA English

AB A review. As muscle relaxants remain a mainstay of modern anesthesia practice, it behooves the anesthesiologists to keep themselves up-to-date on the theory and clin. practice of neuromuscular pharmacol. Progress continues to be made in the basic and clin. aspects of neuromuscular pharmacol., including mechanism of action, blocking drugs, and reversal agent. The new mechanism of action is based on the mol. shape of the relaxants. Although the so-called "ideal relaxant" is still not in sight, and may never be, the new relaxant AV430A and the new reversal agent Org 25969 hold potential to significantly improve patient care. AV430 has superior clin. profile, although it is still considerably slower and longer in action than succinylcholine. The fast onset of rocuronium combined with its complete and immediate reversibility with Org 25969 may match succinylcholine in onset and offset. Both drugs are undergoing clin. trials.

IT 213998-46-0, GW280430A

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(AV\dot{4}30A;\ AV4\dot{3}0$  has superior clin. profile but is slower in action than succinylcholine and fast onset of rocuronium combined with complete reversibility with reversal agent Org 25969 may match succinylcholine in onset and offset in patient)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1,4-dioxo-4-[3-[(18,2R)-1,2,3,4-terrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio[propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (IR,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

●2 C1-

PAGE 1-B

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L6 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:1082676 CAPLUS Full-text
- DN 145:188599
- TI Synthesis and biological evaluation of novel compounds related to 1-arylnaphthalene lignans and isoquinolines
- AU Ding, Hongxia; Lu, Wei; Li, Haibo; Yang, Leixiang; Zhang, Qijun; Zhou, Changxin; Wu, Xiumei; Baudoin, Olivier; Cai, Junchao; Gueritte, Francoise; Zhao. Yu
- CS Department of Traditional Chinese Medicine and Natural Drug Research, College of Pharmaceutical Sciences, Zhejiang University, Hangzhou, 310031, Peop. Rep. China
- SO Chemistry & Biodiversity (2005), 2(9), 1217-1231 CODEN: CBHIAM; ISSN: 1612-1872
- PB Verlag Helvetica Chimica Acta AG
- DT Journal
- LA English
- OS CASREACT 145:188599
- G

- AB Novel compds., e.g. I, designed as hybrids of 1-arylnaphthalene lignans with isoquinoline alkaloids were prepared and evaluated for their cytotoxicities on human tumor cell lines, such as A549, Hela, PC-3, CNE, BEL-7404, and KB. Some of the synthetic compds. exhibited their IC50 values on selected cell lines at 10-6 M scale. The preliminary CoMFA mol. modeling studies of these synthetic analogs were also performed.
- IT 903527-19-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)

(preparation and antitumor activity of arylnaphthalene lignan-isoquinoline hybrids)

- RN 903527-19-5 CAPLUS
- CN Isoquinoline, 1-[3,5-dimethoxy-4-(phenylmethoxy)phenyl]-1,2,3,4-tetrahydro-6,8-dimethoxy-7-(phenylmethoxy)- (CA INDEX NAME)

- OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
  RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L6 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:1026936 CAPLUS Full-text
- DN 143:326227
- TI Preparation of tetrahydroisoquinoline and tetrahydrobenzazepine derivatives as IGF-1R inhibitors
- IN Gunzinger, Jan; Leander, Kurt
- PA Analytecon S. A., Switz.
- SO PCT Int. Appl., 55 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

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			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
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			BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
			ES,	FI,	FR,	GB,	GR,	HU,	IE,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
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		2299							0601			004-				_		
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		2007							0607			006-						
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		2004							0312									

PRA OS CASREACT 143:326227; MARPAT 143:326227

GI

Title compds. I [R2 = H, Me, Et, etc.; R5 = H, alkyl, OH, etc.; R6 = Me, AB alkoxy, OCF3, etc.; n = 1-2; R3 and R4 independently = OH, OMe, halo, etc.; U = N or CR1; R1 = H, alkyl, alkoxy, etc.; V = N or CR7; R7 = H, OH, halo, etc.; W = N or CR8; R8 = H, alkyl, alkoxy, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of IGF-1R. Thus, e.g., II was prepared by amidation of 3-methoxyphenylethylamine with 3,5dichlorobenzoyl chloride followed by cyclization with POC13 and subsequent reduction to the resp. secondary amine which was then acetylated. The

activity of I was evaluated in a cell growth inhibition study using human cell lines MCF-7 and SK-MEL 28 and it was revealed that compds. of the invention possessed IC50 values in the range of 8  $\mu$ g/mL up to 150  $\mu$ g/mL in at least one cell line. I as inhibitors of IGF-1R should prove useful in the treatment of diseases such as but not limited to cancer, atherosclerosis and psoriasis. Pharmaceutical compns. comprising I are disclosed.

IT 865151-32-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tetrahydroisoquinoline and tetrahydrobenzazepine derivs. as  ${\tt IGF-1R}$  inhibitors)

RN 865151-32-2 CAPLUS

CN Isoquinoline, 1,2,3,4-tetrahydro-6-methoxy-1-(3,4,5-trimethoxyphenyl)-(CA INDEX NAME)



OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:715613 CAPLUS Full-text

DN 143:431761

TI Muscle relaxants

AU Takeda, Junzo

CS School of Medicine, Keio University, Japan

SO Sentan Iryo Shirizu (2005), 33 (Masuika no Atarashii Nagare), 70-73 CODEN: SISEBJ

PB Sentan Iryo Gijutsu Kenkyusho

DT Journal; General Review

LA Japanese

AB A review, discussing the action mechanism, pharmacokinetics, and pharmacol. of new muscle relaxants, including rocuronium bromide, GW280430A, and TAAC3.

I 213998-46-0, GW280430A

RL: DMA (Drug mechanism of action); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(action mechanism, pharmacokinetics, and pharmacol. of new muscle relaxants, including rocuronium bromide, GW280430A, and TAAC3)

RN 213998-46-0 CAPLUS

CN Isoquinolinium, 2-[3-[{(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio|propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (IR,2S)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

■2 C1-

PAGE 1-B

- L6 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:540969 CAPLUS Full-text
- DN 144:390714
- TI Identification of novel anthrax lethal factor inhibitors generated by combinatorial Pictet-Spengler reaction followed by screening in situ
- AU Numa, Mehdi M. D.; Lee, Lac V.; Hsu, Che-Chang; Bower, Kristen E.; Wong, Chi-Huey
- CS Department of Chemistry and the Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, 92037, USA
- SO ChemBioChem (2005), 6(6), 1002-1006 CODEN: CBCHFX; ISSN: 1439-4227
- PB Wiley-VCH Verlag GmbH & Co. KGaA
- DT Journal
- LA English
- OS CASREACT 144:390714

GI

AB Anthrax lethal factor (LF) is a zinc-dependent metalloprotease involved in the rapid development of the deadly infection caused by Bacillus anthracis. Blocking its action is a plausible method to mitigate the deleterious effects of late stage infection. We report the inhibition of LF by tetrahydroisoquinoline poly phenolic compds. (I) (R = H, COMe, CH(SH)CH2OH, 2cyclohexen-1-yl, 2-methylpropyl, n-heptyl, iso-Pr, chloromethyl, etc.), in particular (II), which were identified by screening a combinatorial library of 69 compds. that was generated by Pictet-Spengler reaction of 5-hydroxydopamine hydrochloride with aldehydes or ketones. II inhibited LF with Ki of 1.8 µM under physiol. salt concentration We also report the identification of com. available polyphenolic inhibitors against LF, e.g., Anthracene Brown G, Resorcin blue, tannic acid, and 1,2,3,4,6-penta-O-gallov1-β-D-glucopyranose. IT 881426-40-0P

RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation) (identification of anthrax lethal factor inhibitors generated by combinatorial Pictet-Spengler reaction of hydroxydopamine with aldehydes or ketones followed by screening in situ)

RN 881426-40-0 CAPLUS

CN 6,7,8-Isoquinolinetriol, 1-(3,5-dibromo-4-hydroxyphenyl)-1,2,3,4tetrahydro- (CA INDEX NAME)

OSC.G 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS) RE CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.6 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:409312 CAPLUS Full-text

DN 142:441893

TΙ Neuromuscular blocking agents and antagonists thereof

ΤN Savarese, John J.

PA Cornell Research Foundation, Inc., USA

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

Patent

I.A English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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PΙ
  WO 2005041960
                       A2 20050512
                                         WO 2004-US35869
                                                               20041028
                       A3 20050707
    WO 2005041960
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
    US 20050192243
                             20050901 US 2004-975197
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    EP 1684753
                       A2 20060802 EP 2004-810087
                                                               20041028
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
PRAI US 2003-515048P P
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    WO 2004-US35869
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                              20041028
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 142:441893
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- AB The invention provides methods, compns. and kits for controlling the maximum clin. duration of an ultrashort to intermediate halofumarate neuromuscular blockers. In one embodiment, the methods of the invention involve fast-acting agents that antagonize the neuromuscular blockade caused by administration of a halofumarate neuromuscular blocking agent. Agents that can antagonize the neuromuscular blockade caused by administration of a halofumarate neuromuscular blocking agent include cysteine, N-acetylcysteine, qlutathione,
- IT 213998-46-0, GW 280430A
  - RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (halofumarate neuromuscular blocking agents and antagonists thereof such as cysteine analogs)

as well as related cysteine analogs and combinations thereof.

- RN 213998-46-0 CAPLUS
- CN Isoquinolinium, 2-[3-[[(22)-2-chloro-1,4-dioxo-4-[3-[(1S,2R)-1,2,3,4-ternahydro-6,7-dimethoxy-2-methyl-1-(3,4,5-trimethoxyphenyl)isoquinolinio]propoxy]-2-butenyl]oxy]propyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-,chloride (1:2), (1R,2S)- (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

■2 C1-

PAGE 1-B

#### OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- ANSWER 13 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN L6
- AN 2005:284144 CAPLUS <u>Full-text</u>
- DN 142:355176
- TΙ Preparation of 6,8-dimethoxyisoquinolines as novel potassium channels modulators
- IN Garcia, Gabriel; Saeb, Wael; Kramer, Bernd
- PA 4SC AG, Germany
- SO
- U.S. Pat. Appl. Publ., 54 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN. CNT 1

EMIN.	-INT T				
	PATENT NO.	KIND	DATE	APPLICATION NO. [	DATE
PI	US 20050070570	A1	20050331	US 2004-869914 2	20040618
PRAI	US 2003-479159P	P	20030618		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 142:355176

GΙ

ΤI

- AB The invention relates to compds. I [Z = carbonyl, thiocarbonyl or sulfonyl; R1 = alkyl, alkenyl, alkynyl, aryl, H, halo, etc.; R2 = H, OH, CH2SO2alkyl, CH2SO2cycloalkyl, etc.; R5 = alkyl, alkenyl or alkynyl] which are useful for the prevention, alleviation or treatment of diseases, conditions or disorders which are associated with, or dependent on the membrane potential or conductance of cells in mammals, including a human. The general methods for synthesis of compds. I are described. One hundred sixty five compds. I (such as II) were prepared Biol. data were given for representative compds. I. The pharmaceutical composition comprising the compound I is claimed.
- ΙT 848901-37-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 6,8-dimethoxyisoquinolines as novel potassium channels modulators)

- 848901-37-1 CAPLUS RN
- CN 2(1H)-Isoquinolinecarboxamide, N-(4-acetylphenyl)-1-(3,5-dichlorophenyl)-3,4-dihvdro-6,8-dimethoxy- (CA INDEX NAME)

#### osc.g 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

- ANSWER 14 OF 14 CAPLUS COPYRIGHT 2009 ACS on STN
- AN 2005:99335 CAPLUS Full-text
- DN 142:198067
- Preparation of pyrazolo[3,4-c]isoquinoline derivatives as anaplastic lymphoma kinase modulators
- Anand, Neel Kumar; Blazey, Charles M.; Bowles, Owen Joseph; Bussenius, IN Joerg: Costanzo, Simona; Curtis, Jeffry Kimo; Dubenko, Larisa; Kennedy, Abigail R.; Khoury, Richard G.; Kim, Angie I.; Manalo, Jean-Claire L.; Peto, Csaba J.; Rice, Kenneth D.; Tsang, Tsze H.
- Exelixis, Inc., USA PA
- PCT Int. Appl., 239 pp.
- CODEN: PIXXD2
- Patent
- LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

	2005009389 2005009389						0005											
 								0203		WO 2	004-	0523	162		2	0040	123	
WO	2005						2005											
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WO 2004-US23762					W		2004	0723										

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 142:198067; MARPAT 142:198067

$$\begin{array}{c} \mathbb{R}^2 \\ \mathbb{R}^1 \\ \mathbb{R}^1 \\ \mathbb{R}^2 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^3 \\ \mathbb{R}^2 \\ \mathbb{R}^3 \\ \mathbb{R}$$

AB The title compds. I [wherein A = (hetero)cycle; R1-R2 = independently H, halo, CN, etc.; X1 and X2 = independently N or (un)substituted CH; X3 = 0, S, or (un)substituted NH; n = 1-5; Y = N or (un)substituted CH] or pharmaceutically acceptable salts, stereoisomers, prodrugs, or metabolites thereof are prepared as inhibitors of anaplastic lymphoma kinase (ALK). For example, the compound II was prepared in a multi-step synthesis. Some of compds. I inhibited ALK with IC50 of  $\leq$  99 nM. I are useful for the treatment of diseases mediated by ALK, including diseases such as cancer, immunol. disorders, cardiovascular diseases, and other degenerative disorders (no data). Formulations containing I as an active ingredient were also described.

IT 838854-82-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USes)

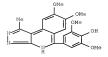
(drug candidate; preparation of pyrazolo[3,4-c]isoquinoline derivs. as anaplastic lymphoma kinase modulators)

RN 838854-82-3 CAPLUS

CN Phenol, 4-(7,8-dimethoxy-1-methyl-3H-pyrazolo[3,4-c]isoquinolin-5-yl)-2,6-

## 10/591,174

dimethoxy- (CA INDEX NAME)



OSC.G 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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